

PSYCHOLOGICAL ABSTRACTS

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GENERAL

(incl. Statistics)

399. [Anon.] Interval timer. *Industr. Equipm. News*, 1941, 9, No. 6, 19.—(*Biol. Abstr.* XV: 21413).

400. [Anon.] John E. Anderson. *J. consult. Psychol.*, 1941, 5, 253.—Portrait.

401. Barbensi, G. Elementi di metodologia biometrica. (Elements of biometric methodology.) Firenze: Niccolai, 1940. Pp. 366. L. 80.—[Abstracted review; original not seen.] An application of biometrics to morphology, physiology, psychology, medicine, and experimental biology.—H. Beaumont (Kentucky).

402. Bovet, P. Les dernières années d'Edouard Claparède. (The last years of Edouard Claparède.) *Arch. Psychol., Genève*, 1941, 28, 183-191.—This supplement to Claparède's autobiography (see XVI: 404) covers the years 1929-1940 and emphasizes his patriotism, simplicity, kindness, and fairness. The bibliography covers the period from 1937 to 1940.—H. Beaumont (Kentucky).

403. Carmichael, L. Psychological aspects of the National Roster of Scientific and Specialized Personnel. *J. consult. Psychol.*, 1941, 5, 253-257.—The Roster may be viewed as a "reservoir of data concerning human individual differences in capacity and skill at the higher levels of achievement." More than 50 technical check lists have been constructed, and nearly 300,000 questionnaires have been returned. The qualitative data are coded in a punch-card index. Data are on hand for 3066 psychologists.—S. G. Dulsky (Rochester Guidance Center).

404. Claparède, E. Autobiographie. (Autobiography.) *Arch. Psychol., Genève*, 1941, 28, 146-181.—Translated from Murchison, C., *A history of psychology in autobiography* (see IV: 4609). Portrait.—H. Beaumont (Kentucky).

405. De Fremery, H. Internship training for the profession of applied psychology. *Psychol. Bull.*, 1941, 38, 735.—Abstract.

406. Ducasse, C. J. Objectivity, objective reference, and perception. *Phil. phenomenol. Res.*, 1941, 2, 43-78.—The objective reference of experience must be in some sense a function of experience itself. The problem resolves itself ultimately into what we mean by the objectivity of a perceived event, since what we mean by a substantial object is reducible to certain sensed properties which in turn are analyzable into witnessed events. Since events occur in time and space, the objectivity of experienced time and space requires explanation. The attempt is made to derive the essential features of experienced time,

including remembering and anticipating, from experience itself. Space-perception is also so derived using as a starting point tactual and kinaesthetic impressions which, it is assumed, are not in themselves spatial. The objectivity of the world, the postulates of a physical world and of causation, events, properties, and objects, all emerge from originally non-objective impressions (intuitions), and the various psychological features of this objectivity are deduced in some detail.—J. J. Gibson (Smith).

407. Ferguson, G. A. The factorial interpretation of test difficulty. *Psychometrika*, 1941, 6, 323-329.—This paper discusses the influence of test difficulty on the correlation between test items and between tests. The greater the difference in difficulty between two test items or between two tests the smaller the maximum correlation between them. In general, the greater the number of degrees of difficulty among the items in a test or among the tests in a battery, the higher the rank of the matrix of intercorrelations; that is, differences in difficulty are represented in the factorial configuration as additional factors. The suggestion is made that if all tests included in a battery are roughly homogeneous with respect to difficulty existing hierarchies will be more clearly defined and meaningful psychological interpretation of factors more readily attained.—(Courtesy *Psychometrika*).

408. Finch, F. H., & Odoroff, M. E. Employment trends in applied psychology, II. *J. consult. Psychol.*, 1941, 5, 275-278.—This paper brings up to date a study of the employment of members of the APA by using data available in the 1940 directory. Since 1938 there has been an 18% increase in APA membership and in members employed in psychological work, a 12% increase in teaching jobs, and a 28% increase in psychological jobs other than teaching. "Despite all the limitations of the data and the methods by which they have been treated, the conclusion that employment in applied psychology is continuing to increase is sound."—S. G. Dulsky (Rochester Guidance Center).

409. Grigorjev, H. F., & Samokhvalov, H. W. [Automatic treadmill for investigation of walking in expeditions and laboratory conditions.] *Fiziol. Zh. S. S. S. R.*, 1939, 27, 511-512.—(*Biol. Abstr.* XV: 21384).

410. Harms, E. [Ed.] The nervous child. Quarterly journal of psychopathology, psychotherapy, mental hygiene and guidance of the child. New York: Philosophical Library. Vol. 1, No. 1, October 1941. Quarterly. \$4.00 per year.

411. Holzinger, K. J., & Harman, H. H. Factor analysis; a synthesis of factorial methods. Chicago:

- University of Chicago Press, 1941. Pp. xii + 417. \$5.00.—This volume is a compilation and integration of the leading factor analysis systems as developed primarily by Spearman, Hotelling, Kelley, Thurstone, and Holzinger with a view towards demonstrating their applicability to other fields utilizing quantification besides psychology. A rigorous logico-mathematical approach is maintained throughout, but an elementary knowledge of mathematics suffices for comprehension, since a thorough appendix embodies essential mathematical tools and proofs as well as tables and detailed computational procedures for the alternative solutions. Major topics presented are: (1) analytic and geometric bases for factor analysis and criteria for selection of solutions; (2) direct orthogonal solutions, which include the bi-factor solution, the principal-factor solution, and the centroid solution; (3) derived solutions, namely orthogonal and oblique; and (4) estimation of factors and relationships between factors, which deals with the description and evaluation of factors and the generalization of analysis. Specific examples from psychometrics, biometrics, and political science illustrate the various techniques.—*L. Kogan* (Rochester).
412. Horn, A. M. Uneven distribution of the effects of specific factors. *Univ. sth. Calif. Educ. Monogr.*, 1941, No. 12. Pp. x + 107.—This study is divided into 2 major sections. In the theoretical section a general law is derived, and a special case of that law is developed. The general law states that in a distribution of values representing measurements of any train, "relatively greater amounts of any specific or chance factor operating positively to cause the score will be found in the upper brackets of the distribution of scores, and relatively smaller amounts of any specific or chance factor operating positively to cause the score will be found in the lower brackets of scores. Similarly, relatively smaller amounts of any chance factor operating negatively . . . will be found in the upper brackets." In the second section the theory is applied to major problems. The topics treated are: (1) regression and the achievement quotient; (2) the achievement difference; (3) constancy of the IQ; (4) test standardization; and (5) miscellaneous problems.—*N. R. Barlett* (Brown).
413. Irwin, J. M. Bergson and Gestalt psychology: corollary critiques of scientific method in psychology. *Psychol. Bull.*, 1941, 38, 739.—Abstract.
414. Jacobson, E. An integrating voltmeter for the study of nerve and muscle potentials. *Rev. sci. Instrum.*, 1940, 11, 415-418.—(*Biol. Abstr.* XV: 21391).
415. Krimsky, E. Modification of the Brewster stereoscope for clinical requirements. *Arch. Ophthalmol., Chicago*, 1941, 26, 808-815.—Limitations of the inflexible Brewster stereoscope were overcome by designing a calibrated instrument with slightly decentered lenses and by using variously decentered targets. Appropriate adjustments are easily made to represent different demands upon accommodation. For training purposes provision is made to bring varying degrees of accommodation and convergence into play as desired, and filters can be inserted conveniently.—*M. R. Stoll* (Lowell, Mass.).
416. Miller, S. E. Sensitive d-c amplifier with a-c operation. *Electronics*, 1941, 14, No. 11, 27 ff.—Suitable for recording bioelectric potentials, the high-gain amplifier described herein has a negligible zero drift, low noise level, and flat frequency response from 0 to 12 kc.—*J. S. Brown* (Yale).
417. Olson, W. C. Proceedings of the forty-ninth annual meeting of the American Psychological Association, Inc., Northwestern University, September 3, 4, 5, 6, 1941: report of the secretary. *Psychol. Bull.*, 1941, 38, 819-885.
418. Piaget, J. La psychologie d'Edouard Claparède. (The psychology of Edouard Claparède.) *Arch. Psychol., Genève*, 1941, 28, 193-213.—As a psychological theorist, Claparède was a biologist and a protagonist of functional analysis; as an experimenter, he worked primarily as a medical clinician; while his general scientific attitude, manifesting itself in his discussions of method and scientific philosophy, was empirical and pragmatic.—*H. Beaumont* (Kentucky).
419. Ramón, F. B. El lugar de la psicología en el plan de estudios. (The place of psychology in the curriculum.) *Rev. mex. Educ.*, 1941, 2, No. 4.
420. R[ickman], J. Sigmund Freud: 1856-1939. An appreciation. *Brit. J. med. Psychol.*, 1941, 19, 1-8.—The 2 chief contributions of Freud were a method (free association in the transference situation) and a few rules for tracing the connection between conscious and unconscious modes of thought (in his *Interpretation of dreams*). All the rest follow directly or indirectly from these.—*E. R. Hilgard* (Stanford).
421. Rosett, J. Synthetic conceptions in neuropsychology. *Sci. Mon.*, N. Y., 1941, 53, 417-426.—Widely different phenomena, as the epileptic seizure, onset and awakening from sleep, reaction of being startled, states of anxiety, states of attention, thought, imagery, and hallucination, exhibit not only a remarkable sameness of the elements of which they are constituted but a striking sameness of pattern into which these elements are arranged. Each begins with a period of disorientation in proximate surroundings and is followed by a period of mental activity. The latter is succeeded by more or less profound unconsciousness and by muscular activity which merges into muscular relaxation. The cycle of each of these conditions is completed by a recurrence of the same events in the reverse order of their onset. On the neural side there occurs a wave of inhibition of function, which floods in succession the several links of the reflex arc in the normal direction of nerve conduction, from the receptive, through the associative, and to the muscular end.—*O. P. Lester* (Buffalo).
422. Satterthwaite, F. E. Synthesis of variance. *Psychometrika*, 1941, 6, 309-316.—The distribution

of a linear combination of two statistics distributed as is Chi-square is studied. The degree of approximation involved in assuming a Chi-square distribution is illustrated for several representative cases. It is concluded that the approximation is sufficiently accurate to use in many practical applications. Illustrations are given of its use in extending the Chi-square, the Student "t" and the Fisher "z" tests to a wider range of problems.—(Courtesy *Psychometrika*).

423. Schain, P. Animal and reptile holder. *Amer. J. Pharm.*, 1941, 113, 100-102.

424. Spearman, C. Professor Thurstone, a correction. *Psychol. Bull.*, 1941, 38, 818.—The author states that Thurstone (see XIV: 3337) has taken g to mean "nothing more or less than the average of all the abilities called for by the battery as a whole," whereas the statistical meaning of g has always been defined by an equation which does not contain "any averaging whatever; as little does it essentially involve 'all' the abilities called for by the battery."—F. McKinney (Missouri).

425. Young, G. A note on multidimensional psychophysical analysis. *Psychometrika*, 1941, 6, 331-333.—On viewing Thurstone's psychophysical scale from the point of view of the mathematical theory of one-parameter continuous groups, it is seen that a variety of different psychological or statistical assumptions can all be made to lead to a scale possessing similar properties, though requiring different computational techniques for their determination. The natural extension to multidimensional scaling is indicated.—(Courtesy *Psychometrika*).

426. Ziehen, T. *Erkenntnistheorie*. (Epistemology.) (2nd rev. ed.) Jena: Fischer, 1939. Pp. 372.—[Abstracted review; original not seen.] This book treats the theory of time, the problem of reality, the theory of cognition of inorganic nature (the cognitive bases of physics), and causality. Ziehen's historical position derives from relativism in the pragmatic direction of William James and the positivistic direction of Mach. His discussion is founded on his own idea of gignomenology, which is closely allied to phenomenology.—M. E. Mörse (Baltimore, Md.).

[See also abstracts 553, 602, 688.]

NERVOUS SYSTEM

427. Aguero y Montoro, H. [Electroencephalography and its psychophysiologic possibilities.] *Vida nueva*, 1940, 45, 221 ff.

428. Balado, M., & Romero, L. F. [Direction of the electric current of the cortex (electroencephalography).] *Arch. argent. Neurol.*, 1940, 22, 7 ff.

429. Clark, S. L., Ward, J. W., & Dribben, I. S. Cerebral cortical stimulation of goats, normal and nervous. *J. comp. Neurol.*, 1941, 74, 409-419.—The motor area of the goat brain was delimited by electrical stimulation, and details of movements to the stimuli applied in the mapped areas are given.

There were no apparent differences between goats considered nervous or excitable in the field and those considered normal.—C. P. Stone (Stanford).

430. Connolly, C. J. The fissural pattern in the brain of Negroes and Whites. The frontal lobes. *Amer. J. phys. Anthropol.*, 1941, 28, 133-154.—H. L. Ansbacher (Brown).

431. Dalsgaard-Nielsen, T. [New electroencephalographic rhythm in epilepsy.] *Nord. Medicin*, 1940, 6, 1119 ff.

432. Gellhorn, E. Physiological and pharmacological investigations on the nature of hypothalamic excitation. Preliminary report. *Amer. J. Psychiat.*, 1941, 97, 944-954.—The experiments with animals "discussed in this paper are of interest not only because they establish the fact that anoxia, hypercapnia and convulsant drugs markedly increase excitability of sympathetic hypothalamic centers, but also because they throw new light on the interrelation between the parasympathetic and the sympathetic nervous system in conditions of central excitation. This seems to be valid for such diversified stimuli as are represented by experiments involving oxygen lack, metrazol convulsions, and the use of electrical stimulation of the hypothalamus calling forth the syndrome of sham rage."—R. Goldman (Boston Psychopathic Hospital).

433. Guttman, R., & Cole, K. S. Electrical rectification in single nerve fibres. *Proc. Soc. exp. Biol.*, N. Y., 1941, 48, 293-297.—A method is described for measuring rectification in a giant nerve of the squid by means of a direct current Wheatstone bridge. Results show that when a fibre is dead, resistance is independent of current; when a fibre is alive, resistance depends on current, and current passes outward more easily than inward. The rectifier effect is shown to be situated in the nerve membrane.—H. Peak (Randolph-Macon).

434. Kuffler, S. W. Isolated nerve-muscle junction. *Nature, Lond.*, 1941, 148, 315.—Here is described a preparation of a single muscle fibre with its nerve supply, dissected from the M. adductor longus of the frog. Characteristics of the response to single stimuli are noted. It is shown that "a nerve impulse gives rise at the nerve-muscle junction to a localized negative potential change as large as the muscle spike potential. This potential, in its turn, sets up the muscle spike. It decrements rapidly along the fibre and falls to about 20 percent at a distance of 0.25-0.35 mm. from the neuromuscular junction." The recovery of excitability in the muscle is described.—N. R. Bartlett (Brown).

435. Lidz, T. A study of the effect of right frontal lobectomy on intelligence and temperament. *J. Neurol. Psychiat.*, 1939, 2, 211-222.—Various mental tests were given, and the general nature of the behavior of a patient was observed during a period of 40 days before and 40 days after the removal of the anterior portion of the right frontal lobe. On the revised Stanford-Binet test the patient scored an IQ of 139 before (using Form L) and after (using Form M) the operation. McCall's Intelligence Test

resulted in a 95 IQ before and a 99 IQ after. In Koh's Block Design Test the patient obtained a maximum score of 137 during both examinations. The profiles resulting from the Downey Will Temperament Test showed no significant changes. Thus the ability to carry on abstract performances, temperament, and general observable behavior showed no significant changes resulting from the loss of frontal lobe brain tissue.—G. W. Knox (Chicago).

436. Moore, A. R. The elements of individuality in simpler organisms. *Psychol. Bull.*, 1941, 38, 731.—Abstract.

437. Motokawa, K., & Tosisada, M. Die elektrenkephalographische Untersuchung über den Adaptationsmechanismus des Zentralnervensystems. (Electroencephalographic study of the adaptation mechanism of the central nervous system.) *Jap. J. med. Sci., Biophys.*, 1941, 7, 213-233.—With a large plane under continuous uniform illumination as stimulus, occipital alpha waves were suppressed. Recovery-time depended on stimulus intensity; 90% recovery occurred for .006 Lux in 43 sec., for .2 Lux in 51 sec., for 1.3 Lux in 59 sec., and for 2.7 Lux in 63.5 sec. At 5.8 Lux recovery reached only 63%; and at 10.8 Lux, no recovery was observed. Adaptation was delayed by lack of homogeneity in the visual field. Activity which diverted the attention from the visual field, such as mental arithmetic or auditory stimulation, expedited recovery of the waves.—E. S. Primoff (U. S. Employment Service).

438. Otani, T. Die Aktionspotentiale des Nerven im Refraktärstadium. (The action potentials of the nerve in the refractory stage.) *Jap. J. med. Sci., Biophys.*, 1940, 7, 1-10.—2 electrical stimuli were applied in immediate succession at different segments of the nerve of the toad. The shorter the S-interval, the longer the latent time. In the early refractory stage, nerves seem more susceptible to a depressive cathode effect and an inversion of polarization than in the normal stage.—E. S. Primoff (U. S. Employment Service).

439. Richter, C. P., & Hawkes, C. D. Increased spontaneous activity and food intake produced in rats by removal of the frontal poles of the brain. *J. Neurol. Psychiat.*, 1939, 2, 231-242.—The removal (both unilateral and bilateral) of the frontal poles of the brain (the cortex and the tip of the striatum) showed behavioral symptoms in rats, similar to those observed in the human manic psychotic. These symptoms included extreme hyperactivity (measured by activity drums and cyclometers), irritability, savageness, and hyper-sexual activity. The operation may have removed certain inhibitory influences, possibly similar to inhibitory influences sometimes lost during certain mental disorders.—G. W. Knox (Chicago).

440. Scheminzky, F. Die "funktionelle Polarität" im Froschrückenmark, eine neue Gesetzmässigkeit in der Physiologie des Zentralnervensystems. ("Functional polarity" in the frog's spinal cord, a

new law in the physiology of the central nervous system.) *Pflüg. Arch. ges. Physiol.*, 1940, 243, 439-456.—The opposite influence on the vertebrate spinal cord of ascending and descending galvanic currents (ascending, stimulating; descending, narcotic) is well known. The author has now developed a theory of functional polarity applying to the entire central nervous system. This theory asserts that the cord is composed of a series of elements which can all be oriented in the same direction, depending on the direction of the current. The quantitative experiments here reported prove that the two-way current acts on the same elements. Comparative experiments, reported elsewhere, show that functional polarity occurs in many organisms (including man) which have a segmental nervous system.—M. E. Morse (Baltimore, Md.).

441. Sjaardema, H., & Glasser, M. A. The value of the electroencephalogram as compared with the clinical and pneumoencephalographic findings for the localization of brain lesions. *Psychol. Bull.*, 1941, 38, 741.—Abstract.

442. Spiegel, E. A., & Scala, N. P. Vertical nystagmus following lesions of the cerebellar vermis. *Arch. Ophthalmol., Chicago*, 1941, 26, 661-669.—Lesions of the posterior medial lobe of the cerebellum were produced in 10 cats, while the vestibular nuclei and their fibre systems were kept intact. Vertical nystagmus resulted, apparently due to the release of the vestibulo-ocular reflex arcs from cerebellar inhibition. The nystagmus changed intensity and sometimes direction when the animal's position was changed; intensity was maximal in the supine position.—M. R. Stoll (Lowell, Mass.).

443. Strasburger, E. H. Die Arbeitsteilung in der menschlichen Grosshirnrinde. (Division of function in the human cerebral cortex.) *Mtschr. Psychiat. Neurol.*, 1941, 104, 78-125.—Strasburger gives a critical review of the present status of the evidence for the functions of Brodmann's areas and their finer architecture; the general laws of localization; and the interrelations of the cortex and the vegetative system. The localists and totalitarians differ in emphasis rather than principle. It is agreed that the different cortical fields have special functions, but we cannot assign them definitely; we know almost nothing of the role of the specialized cortical cells or the layers in the total performance, and nothing of the nature of engrams or the substrata of perception and ideas. The answers to these questions are psychological.—M. E. Morse (Baltimore, Md.).

444. Williams, D. The electro-encephalogram in acute head injuries. *J. Neurol. Psychiat.*, 1941, 4, 107-130.—EEG's were made of 74 cases of head injury in the British army and RAF within 20 days after the injury (16 within 48 hours). Daily, and later weekly readings were taken, until abnormal waves disappeared. Electrodes were at first placed at 16 different locations; later, only in and around the injured region. These records were compared with mental functions and states of consciousness

during each interval of recovery. The mental functions included: general behavior; mood; insight; orientation regarding time, place, and events; comprehension of requests; memory; judgment. With all serious injuries slow waves of high voltage were recorded, ranging from $\frac{1}{2}$ to 7 per sec. With coma, frequency was low (1-2 per sec.) and voltage high. During semi-coma, frequency was greater than during coma, and the voltage was less. During mental confusion, frequency and voltage were variable; sudden outbursts of 4-6 high voltage irregular waves often appeared, with a frequency of 2 per sec. As confusion cleared, recordings were less variable, and the series of high voltage, low frequency, disappeared. With recovery, normal waves gradually approached the injured region.—G. W. Knox (Chicago).

[See also abstracts 414, 449, 487, 556, 807.]

RECEPTIVE AND PERCEPTUAL PROCESSES

445. Allen, F. H. Some effects of binocular vision. *Science*, 1941, 94, 486-487.—The author describes some phenomena associated with the rotation of the head through 90° in the vertical plane as, e.g., when one lies on the side. The normal horizontal stereoscopic effect is then changed to vertical.—F. A. Mole, Jr. (Connecticut).

446. Alverdes, F. Gleichgewichtssinn und Tropotaxis-Schema. (Equilibratory sense and tropotaxis scheme.) *Zool. Anz.*, 1940, 131, 1-10.—(*Biol. Abstr.* XV: 21683).

447. American Optical Company. Pseudo-isochromatic plates for testing color perception. Southbridge, Mass.: American Optical Co., 1940. \$10.00.—The 46 plates here given are of the Stilling-Ishihara type for testing color defects. An 11-page instruction booklet accompanies the plates.—W. S. Hunter (Brown).

448. Avera, F. L. Color relativity: the relativity of psychological and physical color terms. *Amer. J. Optom. & Arch. Amer. Acad. Optom.*, 1941, 18, 455-464.—Difficulties of harmonizing physical and psychological interpretations of color phenomena are discussed. Redefining of terms is proposed as necessary to resolving these difficulties. The author suggests that black be defined as "the reduction in amplitude of response to light stimulus;" white, as "an effectively complete hue aggregate, diluting specific hue identity beyond distinction."—M. R. Stoll (Lowell, Mass.).

449. Brown, C. W. The ability of rats with hemisectioned spinal cords and normal rats to discriminate differences in linear distances. *Psychol. Bull.*, 1941, 38, 741.—Abstract.

450. Brues, C. T. Photographic evidence on the visibility of color patterns in butterflies to the human and insect eye. *Proc. Amer. Acad. Arts Sci.*, 1941, 74, 281-285.—Since the visual range of certain insects extends beyond the human spectrum, it is of interest to ascertain what visual image the insects

may have of, for example, the butterfly. By means of ultraviolet photographs the writer finds evidence for the conclusion that the theoretical image of the insect may not differ greatly from the image on the human retina. But various chromatic markings may be visible to the insects because of ultraviolet reflection, rather than because of reflected wave lengths which fall within the human spectrum. 18 plates are shown, comparing the ultraviolet reflection with the "approximate image in insect eye" for various butterfly species.—F. W. Finger (Brown).

451. Burian, H. M. Fusional movements in permanent strabismus: a study of the role of the central and peripheral retinal region in the act of binocular vision in squint. *Arch. Ophthalm., Chicago*, 1941, 26, 626-652.—75 patients with concomitant strabismus and with at least 20/25 vision in the poorer eye were studied with a new apparatus. This consisted of 5 projectors provided with polaroid screens. Polaroids set in opposite directions were also placed before the 2 eyes of the patient. This made it possible to stimulate macular and peripheral areas of each eye separately and to move the macular and peripheral elements of patterns independently. Various types of response were revealed, as clearly illustrated by 8 case histories: complete absence of fusion, horror fusionis, substitution of anomalous for normal projection when superimposition was approached, and suppression of the peripheral or the central image in one eye. In cases of anomalous correspondence, parallel observations were made; some patients suppressed partially or wholly, some varied according to whether the stimuli were superimposed or were projected to correspond to the angle of squint. Effectiveness of peripheral fusion stimuli depends upon their not being suppressed in either eye; vertical fusional movements may occur in response to movement of peripheral stimuli when there is macular suppression or when anomalous correspondence prevails. Such fusional movements may be evoked in the complete absence of stereopsis.—M. R. Stoll (Lowell, Mass.).

452. Christian, P. Experimentelle Beiträge zur intermodalen vestibulooptischen Wechselbeziehung der Sinnesorgane. (Experimental contributions to the intermodal vestibular-optic interrelationship of the sense organs.) *Pflüg. Arch. ges. Physiol.*, 1940, 243, 370-387.—(*Biol. Abstr.* XV: 21697).

453. Cowan, A., & English, B. C. Causes of blindness in Pennsylvania. *Arch. Ophthalm., Chicago*, 1941, 26, 797-807.—Analysis of causes in 31,352 eyes considered industrially blind (that is, with vision of 20/200 or less) showed only 29 cases not attributable to definite anatomical anomalies or to pathological processes. Of these, 4 are classified under congenital amblyopia, 21 under amblyopia, and 4 under amaurosis.—M. R. Stoll (Lowell, Mass.).

454. Crozier, W. J., & Wolf, E. Theory and measurement of visual mechanism. VI. Wavelength and flash duration in flicker. *J. gen. Physiol.*, 1941, 25, 89-110.—The duplex visual flicker curve of

critical flash intensity vs. flash frequency for red, green, blue, and violet light (foveal fixation) is analyzed in the same way that the curve for white light has already been treated. "The analysis shows that the 3 parameters of the probability summation giving the 'rod' and 'cone' curves are changed independently as a function of wavelength composition of the light, and of the light time fraction." The relationship of time changes is explained in terms of differences in the numbers of neural units potentially excitable and in the number of elements of neural effect obtained from them.—F. W. Finger (Brown).

455. Crozier, W. J., & Wolf, E. Theory and measurement of visual mechanisms. VII. The flicker response outside the fovea. *J. gen. Physiol.*, 1941, 25, 293-308.—The monocular flicker curve (frequency-log intensity) is obtained for a temporal region 6.13° square, using white, blue, and red light. Comparison with foveal data is made in terms of the theoretical analysis already proposed. It is pointed out that the number of excitable units must be distinguished from the frequency of action of these units, before the problem of wavelength can be solved.—F. W. Finger (Brown).

456. D'Amour, F. E., & Smith, D. L. A method for determining loss of pain sensation. *J. Pharmacol.*, 1941, 72, 74-79.—(*Biol. Abstr.* XV: 21820).

457. Eysenck, H. J. Psychological aspects of colour measurement. *Nature, Lond.*, 1941, 147, 682-683.—Psychophysical experiments failed to support Ostwald's claims that the 8 Ostwald greys are equidistant psychologically, and also that the 24 colors which go to make up the Ostwald color circle are equidistant. 2 further claims were not supported. These were that (1) triads made up of 3 greys, the differences between which are equal, are pleasing, and (2) diads made up of 2 colors 8 steps apart on the color circle are pleasing. Possibly the data failed to support these latter hypotheses because the psychological distances between the Ostwald cards were not equal.—N. R. Bartlett (Brown).

458. Ford, N., & Mason, A. D. Taste reactions of the Dionne quintuplets. *J. Hered.*, 1941, 32, 365-368.—These monozygotic quintuplets were tested for taste reaction to phenyl-thio-carbamide (PTC), and all were found to be "tasters," as was their mother. Siblings have not yet been tested. Other stimuli administered were for salt, sweet, sour, and bitter. All stimuli, including that for PTC, were presented by means of a solution-soaked piece of paper which the children readily chewed. The checks were helpful in determining reliability of answers and in assisting the taster to make comparisons.—G. C. Schwesinger (American Museum of Natural History).

459. Frings, H. Stereokinetic and photokinetic responses of *Lycosa rabida*, *Calosoma lugubre*, and *Harpalus caliginosus*. *J. comp. Psychol.*, 1941, 32, 367-377.—Light adapted individuals of wolf spiders and 2 species of ground beetles were tested for photo-

kinesis, stereokinesis, and for reactions to red, yellow, and blue bands of light. All were markedly photokinetic and became akinetic in the dark. The wolf spiders were stereoneutral. The ground beetles showed no tendency to come to rest in corners, but did exhibit akinesis upon unilateral contact. The wolf spiders showed no tendency to become akinetic in one color more than in any other, but the ground beetles showed a marked tendency to become akinetic in the red area rather than in either yellow or blue. "The reactions to colored light, as herein tested, offer no pertinent information concerning the possibility of color-vision in these species."—K. F. Muensinger (Colorado).

460. Guild, S. R., Polvogt, L. M. Sanstead, H. R., Loch, W. E., Langer, E., Robbins, M. H., & Parr, W. A. Impaired hearing in school children. *Laryngoscope, St. Louis*, 1940, 50, 731-746.—This is a report on otological examinations of 1365 Baltimore school children between the ages of 8 and 14, during the school year 1939-1940. "Over 40 percent of the 1365 children examined do not hear all tones within the range of intensity commonly regarded as normal; three fourths of the group, all of whom are attending school, have naso-pharyngeal conditions that are a potential menace to hearing."—C. K. Trueblood (Cambridge, Mass.).

461. Honjo, I. Farbensinn der Feuersalamanderlarven. (Color sense of salamander larvae.) *Mem. Coll. Sci. Engng Kyoto*, 1939, 15, 207-235.—(*Biol. Abstr.* XV: 21690).

462. Hopkins, C. R. Size and location of the blind spot of Mariotte as computed from one hundred angioscotometric records. *Arch. Ophthalm., Chicago*, 1941, 25, 811-813.—100 blindspots in normal eyes were measured with the Evans technique. White targets were moved from the seeing to the non-seeing area. The distance correction was worn. Tests were made at 90 mm. with a columnating lens placed before the eye. Larger blindspots were found than have usually been recorded. The following measurements are included in the table of results: macula to nasal border, 13°4'2"; width of blindspot, 7°44'0"; macula to temporal border, 20°11'53"; above horizontal, 2°12'0"; below horizontal, 5°53'20".—M. R. Stoll (Lowell, Mass.).

463. Houghten, F. C., Olson, H. T., & Sucin, J., Jr. Sensation of warmth as affected by the color of the environment. *Illum. Engng. N. Y.*, 1940, 35, 908-914.—In an experimental room with a constant temperature of 71.5° F. and a humidity of 50% a 5.5 ft. screen area was illuminated in succession with white, blue, and red light. 2 subjects, seated at a distance of 3.5 ft. from the screen, reported as to whether they felt ideal comfort, slightly cool, slightly warm, cool, or warm under each of the 3 stimulus conditions. In addition, pulse rate and skin and oral temperatures were recorded. No significant psychological or physiological variations were found under the 3 conditions, most verbal reports being "ideal comfort." The authors suggest the use of threshold conditions for comfort

rather than optimum conditions for comfort, to constitute a more accurate measuring device for further investigation.—G. W. Knox (Chicago).

464. Jenkins, W. L. Studies in thermal sensitivity: 16. Further evidence on the effects of stimulus temperature. *J. exp. Psychol.*, 1941, 29, 413-419.—4 temperatures in 3° steps between the limits of 38 and 47° C. were employed for random thermal stimulations on the volar forearm and forehead of 12 subjects. The results obtained from the 7 most consistent subjects reveal increase in the percentage of thermal responses as a function of the magnitude of the temperature differences employed in the stimulations. These results are interpreted so as to support the author's concentration theory, which assumes *inter alia* all-or-none receptor behavior, differentiation in regard to receptor sensitivity, and intensity of warmth depending on the concentration of the receptors in action.—M. J. Zigler (Wellesley).

465. Judd, D. B. Color systems and their interrelation. *Illum. Engng. N. Y.*, 1941, 36, 336-372.—A color system is a means of specifying a color by selecting one member from a system of known standardized colors, which is most similar to the color in question. The author discusses various color systems in use, and points out the relationship between them. There are 2 main types of color systems, one uses the additive method of color mixing and the other the subtractive method. In using the additive method, the color is specified by selecting the proper combination (addition) of 3 light stimuli, to match the color (the tri-stimulus method). 8 tri-stimulus systems (each using a different set of wave lengths for combination) are defined, and methods are given for transforming specifications from one system to another. Color systems based on the subtractive method of color mixing, involve the use of filters, which subtract a known part of the light stimulus, or opaque surfaces (pigmented or dyed), which absorb a known part (subtract) and reflect to the eye the remaining part of the incident light.—G. W. Knox (Chicago).

466. Kikuti, Y., & Yosida, T. Behaviour of time-difference and phase-difference in the binaural effect. *Jap. J. med. Sci., Biophys.*, 1940, 7, 71-77.—Binaural spatial sense for a pure tone of .5 sec. duration is affected either by phase-difference or by time-difference. When time-difference and phase-difference are opposed (as is not the case in ordinary life situations), the tendency exists to localize the sound in the central plane. With time-difference alone, sound is localized toward the earlier stimulated ear. With phase-difference alone, when the difference is more or less than 180° , sound is localized toward the ear receiving the earlier phase cycle; but at 180° the image is in an unstable position.—E. S. Primoff (U. S. Employment Service).

467. Kobrak, H. G., Lindsay, J. R., & Perlman, H. B. Experimental observations on the question of auditory fatigue. *Laryngoscope, St. Louis*, 1941, 51, 798-809.—The authors describe experiments on human and infra-human subjects in which "acoustic

reflexes and hearing sensations are observed under the influence of a fatiguing tone." They submit 3 sets of observations: (1) of central fatigue, i.e. "subjective fatigue without signs of diminished cochlear irritation;" (2) of peripheral fatigue, as evidenced by "an elevation of the auditory threshold, both objectively and subjectively. This kind . . . is located either in the cochlea or the primary acoustic nuclei . . . more likely the cochlea;" (3) of "reflex contractions during prolonged stimulation. This relaxation is different from true fatigue, since recovery symptoms observed in true fatigue are missing. This may be interpreted as acoustic adaptation. . . . The acoustic stimuli of daily life do not fatigue the acoustic reflex of the muscles of the middle ear."—C. K. Trueblood (Cambridge, Mass.).

468. Kondo, T. A new analysis of anomaloscope tests of the colour sense; on tests with the anomaloscope model I. *Jap. J. med. Sci., Biophys.*, 1941, 7, 201-211.—Subjects were tested for spectral color-matching with the equation $aR + bG = cY$, in which a , b , and c are intensity values and $a + b$ equals a constant. For the totally color-blind, the equation is not affected by changes in color as long as luminosity is constant. Relative values of a and c are given for protanopes (based on 12 eyes), deutanopes (46 eyes), normals (10 eyes), and anomalous trichomats (protanopes, 6; deutanopes, 10 eyes). The equation for normals cuts through the intersection of the 2 lines representing equations of protanopia and deutanopia respectively. The protanope equation describes the Young-Helmholtz component I, and the deutanope equation, component II.—E. S. Primoff (U. S. Employment Service).

469. Le Hardy, L. H. The bases of color vision. *Illum. Engng. N. Y.*, 1941, 36, 295-312.—The various fields related to color vision are brought together into a condensed form. The author first reviews the origin and general nature of the light stimulus. The anatomy of the eye is then discussed. Absorption curves are given for the cornea, aqueous humor, lens, and vitreous humor. This absorption causes the wave length composition of the light striking the retina to be different than the wave length composition incident to the eye. The anatomical relationships of the rods, cones, and bipolar cells are given. The author reviews the nature of the physiological processes (especially of the rods and cones) instigated by the light stimulus. The article terminates with a discussion of the more purely psychological phenomena, the effects of memory traces on present perceptions and the phenomenon of color constancy. Factors of organization are stressed. "The simplest perceptual pattern is synthesized cerebrally into a unity, and all our previous training, habits, experiences, and emotions enter into the synthesis."—G. W. Knox (Chicago).

470. Loewenstein, A., & Donald, G. A color stereoscopic phenomenon. *Arch. Ophthalm., Chicago*, 1941, 26, 551-564.—Having observed that the white

and black letters of the title on a red book appeared to rise from the surface of the cover, the authors investigated various aspects of this phenomenon in 11 experiments which are described in detail. They found that the phenomenon was most evident with a red background, with blue, green, black, and yellow following in that order; only a flat impression was associated with a white background. White surfaces on a red ground appeared farther forward as they were increased up to an optimal size. The stereoscopic effect was enhanced by the introduction of black bars. The background color tends to determine the relative apparent positions of variously colored details, but these can frequently be reversed temporarily by concentrated effort. Stereoscopic effects were also obtained with achromatic contrasts, so the explanation that there is a 2 diopter difference in foci of the long and short wave lengths is considered insufficient. The phenomenon could be elicited, but with more difficulty, when one eye alone was used. Apparently a change of the background from an apparent surface color to a film color is a preliminary to the development of the stereoscopic impression.—*M. R. Stoll* (Lowell, Mass.).

471. Loken, R. D. The effect of vitamin "A" on color-vision deficiencies. *Psychol. Bull.*, 1941, 38, 734.—Abstract.

472. Löwenstein, O., & Sand, A. The individual and integrated activity of the semicircular canals of the elasmobranch labyrinth. *J. Physiol.*, 1940, 99, 89-101.—(*Biol. Abstr.* XV: 21706).

473. MacNaughton-Jones, H. Hearing and equilibrium. Baltimore: Williams & Wilkins, 1940. Pp. vii + 128. \$2.50.—A place theory of hearing is presented in which the parts of the hearing mechanism are assigned functions sometimes totally different from those usually attributed to them. An important feature of the theory is that the mass of different segments of the basilar membrane and associated structures replaces tension of individual fibers "which has been a serious flaw in previous explanations." "The cochlea and its contents resolve themselves into an indefinite number of systems or units, each capable of sympathetic vibration with a particular frequency, and each unit consisting of a mobile partition and a column of fluid above it and below it, reaching from the tympanum. It differs from former conceptions inasmuch as tension plays no part." The structure of the external canal is such that air waves are directed to and act upon the round window. The same air waves, by means of the ossicles, set up reciprocal movements at the oval window. Centrifugal force resulting from the spiral form of the cochlear canal converts longitudinal pressure waves of a given frequency into transverse waves occupying and limited to one particular segment of the basilar membrane. The thickness of the latter, and the relative length of the liquid columns above and below the responding segment are the selective agents.—*C. V. Hudgins* (Clarke School).

474. McFarland, R. A., Evans, J. N., & Halperin, M. H. Ophthalmic aspects of acute oxygen deficiency. *Arch. Ophthalm.*, Chicago, 1941, 26, 886-913.—Recent studies on the effects of low oxygen pressures on visual functions are reviewed and evaluated. Some discordant results have been reported, so it remains doubtful to what extent visual fields are affected and whether normal color vision is disturbed; but the following conclusions seem fairly well established. The eye, like the brain, quickly shows a depression of function in response to anoxia. Rod and cone functions seem to be similarly affected. Depression is most noticeable with stimuli of low intensity or where the function shows some disturbance under normal conditions, as in cases of color anomaly or of heterophoria. Dark adaptation thresholds are raised but quickly become normal when the anoxia is relieved. Brightness difference thresholds are raised and those for flicker fusion lowered. Greater intensities of illumination are required to reach similar degrees of acuity except at the relatively high levels where the normal curve flattens out. The latent period of afterimages is prolonged, and they may fail to appear. Ocular muscular adjustments become relatively inefficient; diplopia is frequently noticed in cases of hyperphoria, fixation is interfered with by nystagmoid movements, reading requires more fixations, and movements are less regular. Near points of accommodation and convergence recede.—*M. R. Stoll* (Lowell, Mass.).

475. Mendelbaum, J., & Mintz, E. U. The sensitivities of the color receptors as measured by dark adaptation. *Amer. J. Ophthalm.*, 1941, 24, 1241-1255.—An experimental study of cone dark adaptation using colored adapting lights and test lights gave results consistent with Hecht's curves, which indicate the existence of closely overlapping sensitivities of the color receptors rather than widely separated curves. The data fit the assumption of 3 closely related pigments probably developing from one precursor rather than 3 totally different absorption spectra from dissimilar substances.—*D. J. Shaad* (Lawrence, Kansas).

476. Moon, P. Color determination. *Illum. Engng. N. Y.*, 1941, 36, 313-335.—The author reviews the various methods of determining the intensity and composition of the light stimulus. The use of spectroradiometers and spectrophotometers, the calculation of tristimulus values, visual colorimetry, and photoelectric colorimetry are discussed.—*G. W. Knox* (Chicago).

477. Nickerson, D. The illuminant in color matching and discrimination. *Illum. Engng. N. Y.*, 1941, 36, 373-399.—18 different illuminations were compared in regard to their effect on the ability of the subjects to differentiate similar hues and on the experienced relationships between colors (different hues appearing differently related under various illuminations).—*G. W. Knox* (Chicago).

478. Riddell, W. J. B. Two clinical tests for night blindness. *Trans. ophthalm. Soc. U. K.*, 1940,

60, 181 ff.—[Abstracted review; original not seen.] Visual acuity of night blind patients was found to be reduced when tested by low illumination. Stilling color test charts revealed errors in yellow-blue sensitivity for night blind subjects; colors were correctly named on the Ishihara charts.—D. J. Shaad (Lawrence, Kansas).

479. Riggs, L. A. Continuous and reproducible records of the electrical activity of the human retina. *Proc. Soc. exp. Biol., N. Y.*, 1941, 48, 204-207.—A technique is described for providing an artificial pupil and stable electrical connection with the cornea. A contact lens is coated with black enamel leaving an opening of desired size. A corneal electrode is cemented into a hole in the lens.—H. Peak (Randolph-Macon).

480. Roslavtzev, A. V. [Contrast sensitivity in normal trichromats and in people with anomalies of color vision.] *Vestn. Oftal.*, 1940, 17, 663 ff.—[Abstracted review; original not seen.] Contrast sensitivity for judgment of heated metal in industry was found equivalent in persons with color anomalies and those with normal color vision.—D. J. Shaad (Lawrence, Kansas).

481. Scott, H. A. An examination of stereopsis. *Dioptr. Rev. & Brit. J. physiol. Optics*, 1941, 2, 3-20.—[Abstracted review; original not seen.] The ideal stereoscopic targets would be separate and mounted so that they could be moved nearer to one another or farther apart by a finely calibrated device similar to an engineer's micrometer. This would provide for accurate measurement of the parallax angle required to give a stereoscopic effect. Using such a device, norms for stereopsis could be established.—M. R. Stoll (Lowell, Mass.).

482. Smith, C. M. History of the optic nerve and faculty of seeing. *Optom. Wkly*, 1941, 32, 1073-1076.—A brief history of theories of the function of the optic nerve and its anatomy, beginning with the ancient philosophers and concluding with modern scientific explanations of visual function.—D. J. Shaad (Lawrence, Kansas).

483. Smith, S. Utrocular discrimination. *Psychol. Bull.*, 1941, 38, 733.—Abstract.

484. Steven, D., & Wald, G. Vitamin A deficiency: a field study in Newfoundland and Labrador. *J. Nutrit.*, 1941, 21, 461-476.—(*Biol. Abstr.* XV: 17801).

485. Studnitz, G. v. Die Ölkugeln der Zapfen und des Pigmentepithels und die Regeneration von Zapfensubstanz und Sehpurpur. (The oil droplets of the cones and the pigmented epithelium and the regeneration of cone substance and visual purple.) *Pflüg. Arch. ges. Physiol.*, 1940, 243, 181-205.—(*Biol. Abstr.* XV: 21713).

486. Sudô, Y. [On the effect of the phenomenal distance upon time perception.] *Jap. J. Psychol.*, 1941, 16, 95-115.—From experimental findings based on the Müller-Lyer figure the author argues that in S-effect (the effect of space upon time perception) the agent is the phenomenal spatial distance and not the objective or retinal distance.

Phenomenal distance expands or contracts not in proportion to changes of the objective stimulus distance. Phenomenal or intuitive factors and not the status of peripheral stimulation play a determining role in S-effect as in other fields of perception.—R. Kuroda (Keijo).

487. Talbot, S. A., & Marshall, W. H. Physiological studies on neural mechanisms of visual localization and discrimination. *Amer. J. Ophthalm.*, 1941, 24, 1255-1265.—Cortical maps prepared by electrical stimulation methods (cat and monkey) indicate that each hemi-cortex projects to the contralateral half-field of both eyes, the line of division splitting the fixation point; no biprojection of the macula is indicated. A 1-minute circle at the fovea is magnified 10,000 times in area at the cortex. Under such conditions, the cortical image may be but 1/10th of a cone unit. The multiplicity of overlapping paths offers a more detailed mechanism for binocular fusion than had been postulated by a simpler one-to-one relationship between cortex and retina.—D. J. Shaad (Lawrence, Kansas).

488. Verhoeff, F. H. "A color stereoscopic phenomenon." *Arch. Ophthalm.*, Chicago, 1941, 26, 914.—In criticism of the paper with this title by Loewenstein and Donald (see XVI: 470), Verhoeff states that he has given an optical explanation of the phenomena described. Chromatic aberration and eccentricity of the lens system are responsible. Readers are referred to his paper, "An optical illusion due to chromatic aberration," *Am. J. Ophthalm.*, 1928, 11, 898.—M. R. Stoll (Lowell, Mass.).

489. Wald, G. The visual systems of euryhaline fishes. *J. gen. Physiol.*, 1941, 25, 235-245.—The euryhaline fishes can survive in a wide range of salinities. The retinas of some of these species contain mixtures of the rhodopsin and porphyropsin visual systems, but in those that spawn in fresh water the porphyropsin is predominant (or exclusively present), while in those spawning in sea water the rhodopsin is predominant. This parallelism between salinity of environment and composition of visual systems is fixed genetically, and is independent of the history of the individual.—F. W. Finger (Brown).

[See also abstracts 406, 415, 437, 519, 537, 540, 542, 550, 559, 694, 720, 725, 727, 736, 764, 805.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

490. Bernard, J. A note on non-informative shock. *J. exp. Psychol.*, 1941, 29, 407-412.—52 undergraduates serving as experimental group in learning experiments comprising 20 trials in the Fox stylus maze were divided into 2 sub-groups. Electric shock was administered to one group for errors as regards the odd cul-de-sacs, and to the other sub-group for errors involving the even cul-de-sacs. 24 undergraduates, serving as controls, learned under like conditions except that no shocks were

given for errors. Comparison of the results obtained from experimental and control groups yielded no statistically reliable differences in regard to any of the 6 criteria utilized. "This is interpreted as being due to the opposition of two effects of the shock: (1) The general incentive effect which has been demonstrated with non-informative shock, and (2) the tendency of punishment for errors to cause the subject to concentrate upon the avoidance of the punished errors to the neglect of the non-punished errors, which is not found with non-informative shock."—*M. J. Zigler* (Wellesley).

491. Biel, W. C., & Wickens, D. D. The effects of vitamin B₁ deficiency on the conditioning of eyelid responses in the rat. *J. comp. Psychol.*, 1941, 32, 329-340.—Since previous studies on the effects of vitamin B deficiency upon maze learning had to cope with motivational differences between normal and deficient animals and with weakness in the deficient animals' extremities, and since the deficient animals had to be fed a normal diet before maze training was begun, the authors decided to control these factors by using the speed of acquisition of a conditioned eyelid response as a measure of the effects of vitamin B₁ deficiency. 15 rats were kept on a B₁ deficient diet from the time they were a week old and throughout the experiment. At an age of 50 to 70 days they and 15 normally fed litter mates were subjected to a 3-day training series in which a light was used as the conditioned stimulus for the eyelid response elicited by an air puff. The deficient animals were inferior to the controls as shown by their significantly lower average percent of conditioned responses. These results agree with those obtained with maze learning experiments.—*K. F. Muenzinger* (Colorado).

492. Bingham, W. E., Jr. A study of sense-imagery conditioning the aims of education of John Dewey and Rabindranath Tagore. *Psychol. Bull.*, 1941, 38, 745.—Abstract.

493. Bown, M. D. Variability as a function of ability and its relation to personality and interests. *Arch. Psychol.*, N. Y., 1941, No. 262. Pp. 45.—The nature of the interrelationships between inter-test variability (the variability between different mental tests) and levels of ability, both average and for each of the specific tests, was investigated in a group of 318 college freshmen. 3 different methods of analyzing the data were utilized: (1) linear and non-linear correlation methods, (2) comparisons of the variability of groups from extremes and at the average in ability, and (3) curve fittings. The evidence indicated that ability, as measured by the separate tests, is not functionally dependent upon variability and that variability is not differentially related to average ability. The finding of some evidence of a curvilinear relation for variability as a function of level of ability in 3 of the separate tests was accounted for by a regression effect arising from the low intercorrelations of the tests. A similar lack of relationship between inter-test variability and measures of personality and interest-attitudes was found.—*K. W. Spence* (Iowa).

494. Bunch, M. E. A comparison of retention and transfer of training from similar material after relatively long intervals of time. *J. comp. Psychol.*, 1941, 32, 217-231.—A retention experiment is reported and compared with a previously published transfer experiment (see XIII: 5064). 180 rats learned a 14-unit maze, designated as B, and were then divided into 5 sub-groups which relearned this maze at various intervals up to 120 days. The 203 rats in the transfer group had been given 3 trials on a different maze and were then divided into 6 sub-groups which learned maze B at various intervals from 0 to 120 days. The retention curve showed the usual negative acceleration with a gradual flattening out, while the learning efficiencies on maze B of the transfer group during the same period were characterized by a slight initial rise and a gradual decline with values at 120 days about equal to those at the zero time interval. The outstanding result was that the latter part of the retention curve was close to the fairly stationary level of the saving from transfer. Thus retention after a certain interval was functionally equivalent to the transfer effect from training on a similar task. What is retained are general ways of behaving "in the sense that they are as appropriate or adaptive to another problem situation in the same general class as to the particular one originally learned."—*K. F. Muenzinger* (Colorado).

495. Burack, B. The nature and efficacy of methods of attack on different reasoning problems. *Psychol. Bull.*, 1941, 38, 719.—Abstract.

496. Burt, H. E. An experimental study of early childhood memory: final report. *J. genet. Psychol.*, 1941, 58, 435-439.—Meaningless material (selections of Greek drama) was read to the subject daily from the age of 15 months to the age of 3 years. At the ages of 8½, 14, and 18 years, this original material, as well as equally difficult new material, was learned by a modified prompting method. The original material was learned with 27-30% fewer repetitions than the new material at the age of 8½ years, with 8% fewer repetitions at 14 years, and with no saving at the age of 18. (See also XI: 4480.)—*F. W. Finger* (Brown).

497. Buxton, C. E. List structure (organization) as a determiner of amount of retroactive inhibition. *Psychol. Bull.*, 1941, 38, 719.—Abstract.

498. Carroll, J. B. A factor analysis of verbal abilities. *Psychometrika*, 1941, 6, 279-308.—A multiple-factor analysis was made of a battery of 42 tests of verbal abilities administered to 119 college adults. Where necessary, the distributions of test scores were normalized before the inter-test correlations were computed. Thurstone's *M* (memory of rote learning) factor has been confirmed, but his *V* (verbal relations) factor seems to have been split into two or possibly three factors, *C*, *J*, and *G*; and his *W* (word fluency) factor has been split into two factors, *A* and *E*. The *C* factor seems to represent the richness of the individual's stock of linguistic responses, and the *J* factor seems to involve the ability to handle semantic relationships. No

satisfactory interpretation can as yet be made of the *G* factor. The *A* factor seems to correspond to the speed of association for common words where there is a high degree of restriction as to appropriate responses. The *E* factor is described as an associational facility with verbal material where the only restriction is that the responses must be syntactically coherent. The new factors are: *F*, facility and fluency in oral speech; *H*, facility in attaching appropriate names or symbols to stimuli; and *D*, speed of articulatory movements.—(Courtesy *Psychometrika*).

499. Cooper, J. B. The tension values of differently "structured" situations. *Psychol. Bull.*, 1941, 38, 731.—Abstract.

500. Cronbach, L. J. Measuring students' thinking about a presidential election. *Sch. Rev.*, 1941, 49, 679-692.—Students' choices between the 2 major candidates in the last presidential election were supported by checking those of a list of 120 reasons which were considered as important in the formulation of their decisions. The percentages of each group responding to certain significant items are tabulated, and the relative popularity of the 7 main issues under which all the items were classified is reported for each candidate. A generally high degree of consistency in reasoning is indicated among these college students, but in many cases checking of invalid arguments points to inadequate patterns of thinking. Further possibilities for the use of such an instrument in the investigation of general habits of reasoning on social problems are contemplated. Difficulties of construction and validation and precautions to be observed in interpretation are pointed out.—R. C. Strassburger (St. Joseph's College for Women).

501. Eysenck, H. J. The validity and reliability of group judgments. *J. exp. Psychol.*, 1941, 29, 427-434.—The author takes up one by one the main criticisms submitted by B. B. Smith (see XVI: 525). He presents an equation in terms of which it is possible to justify the use of the approximate form of the equation in question instead of the full formula. As regards the objection that the two-factor theory upon which the approximate formula depends was not shown to be applicable, it is indicated that this step is unimportant in view of the fact that judgments from a large number of subjects are being used so that the errors involved decrease so rapidly that the approximate formula is applicable whether or not the two-factor theory holds. The criticism that the equation used deals with reliability and not with validity is perhaps of greatest interest. In this connection appeal is made to investigations in personality tests for the precedent to determine validity "without the use of an outside criterion." Here the test becomes its own criterion, and it is argued in turn that in the present instance the criterion would be derived from the judgments themselves.—M. J. Zigler (Wellesley).

502. Finley, C. B. Equivalent losses in accuracy of response after central and after peripheral sense

deprivation. *J. comp. Neurol.*, 1941, 74, 203-237.—Confirming the results of others, the author reports that the extent to which rats use vision in learning an elevated maze varies greatly, some individuals showing complete dependence and others complete independence of visual stimuli. In this study losses in accuracy of maze running by rats trained in the light were determined under 3 conditions: running the maze in darkness, after enucleation of both eyes, and following cortical lesions in the occipital areas. The losses in accuracy were the same under these 3 conditions. The author reinterprets data in one of Lashley's studies from which it was inferred that inaccuracy of maze running is much greater following central sense deprivation than after peripheral sense deprivation; he believes that Lashley's data fail to support the conclusion drawn. Instead they are in harmony with those of the present study. Lesions with the same surface areas but involving more than one functional zone effect greater losses than lesions of the same surface area confined to one functional zone.—C. P. Stone (Stanford).

503. Fromme, A. An experimental study of the factors of maturation and practice in the behavioral development of the embryo of the frog, *Rana pipiens*. *Genet. Psychol. Monogr.*, 1941, 24, 219-256.—The experimentation here reported included the effects of immobilization or lack of use, of positive stimulation, and of more than normal use upon the development of behavior, as well as the time taken for removal of the specific effects of the narcotic used to induce immobilization. An apparatus "which made the measurement of swimming a relatively simple task" was used. "It must be concluded that although the development of structure may be explained completely in terms of the growth process, the development of behavior is determined only in part by the structures produced by growth and is affected by its own behavioral antecedents as well. . . . Practice, then, during the rudimentary stages, of the development of an organ may be said to be a variable, influencing the functional ability of that organ upon maturity." 42 references.—F. M. Teagarden (Pittsburgh).

504. Ganike, E. A. [The technique of investigation of conditioned reflexes as applied to mice. II.] *Fiziol. Zh. S. S. S. R.*, 1939, 27, 477-480.—Description of a labyrinth apparatus to study the reaction of a group of 6 mice.—(Courtesy *Biol. Abstr.*).

505. Gibb, J. R. The relative effects of sleeping and waking periods upon the retention of nonsense syllables. *Psychol. Bull.*, 1941, 38, 734.—Abstract.

506. Gibson, J. J. A critical review of the concept of set in contemporary experimental psychology. *Psychol. Bull.*, 1941, 38, 781-817.—The aim of this review is to make a systematic sample of the experimental writings related to the concept of set, to formulate problems, draw distinctions, and expose inconsistencies. The article covers the historical origins of the concept, set in the reaction time experiment, the relation between set and habit, set as a determinant of perception, set in relation to human

problem-solving, the experimental investigation of the nature of tasks, and preparatory set in the human conditioning experiment. The conclusions are that no common meaning can be discerned for set. It has been found to correlate with 8 different things. A number of common assumptions are false as its dependence upon verbal instructions and its temporary character. Crucial ambiguities are found in the relationship of set to past experience and in the discussions of its voluntary nature. Bibliography of 125 titles.—*F. Mc Kinney* (Missouri).

507. Gottsdanker, R. M. How an individual evaluates his unverified guesses. *Psychol. Bull.*, 1941, 38, 730.—Abstract.

508. Grinstead, A. D. Bodily movement as related to problem solving. *J. exp. Psychol.*, 1941, 29, 370-379.—All bodily movements made by 51 undergraduate and 2 graduate students were recorded during the solution of mental problems of the type included in the average adult level of the latest revision of the Stanford-Binet scale in which the task is to specify how a given number of pints of water can be measured by means of 2 containers of different capacities. The subject was seated in a comfortable stabilometer which was so equipped with coil-springs that movements of the arms, head, body, and feet were recorded. Records were also taken while the subject was engaged in the solution of a Porteus pencil maze. The records obtained do not coincide with the notion that problem solving depends essentially on a postural set; they seem to show that the greatest amount of movement occurs when the problem is nearing solution. Increased movement is also manifested at times when unsuitable attacks are being abandoned. The meaning of increased movement when the problem is nearing solution is believed to have its parallel in the motility of the sleeping person as described by H. M. Johnson. While attending to the task, the subject is 'asleep' to certain other existing stimuli; however the latter may secure attention and involve adjustment as soon as the problem has been solved.—*M. J. Zigler* (Wellesley).

509. Heron, W. T., & Carlson, W. S. The effects of metrazol shock on retention of the maze habit. *J. comp. Psychol.*, 1941, 32, 307-309.—52 rats were given 17 trials in a maze and after 8 days an additional 12 trials. On the basis of errors for this second period they were paired off into 2 groups, one of which was given metrazol injections on 4 successive days. 12 of the injected animals died. The 12 animals in the control group with which they had been paired were not included in the 23 retention trials which were given after the metrazol injections. The results were negative. There was no appreciable difference in the mean error scores of the metrazol and control groups.—*K. F. Muensinger* (Colorado).

510. Hodgson, G., & Vaughn, J. Progress in the acquisition of a complex act of skill. *Psychol. Bull.*, 1941, 38, 719.—Abstract.

511. Hunter, W. S., & Hall, B. E. Double alternation behavior of the white rat in a spatial maze.

J. comp. Psychol., 1941, 32, 253-266.—The maze used in this experiment was of the elevated block type with 11 blocks and 10 blind alleys. The sequence of correct turns was rrlrlrrlrr. Between trials the blocks were interchanged and the maze was rotated 45°. During the first 65 trials not one of the 10 blind rats made an errorless run. 2 of them showed some ability to make short double alternation runs. When training was continued without interchange of sections and rotation of the maze, 3 of the rats never learned the problem. The 7 successful rats continued the training while the maze was rotated, but no rat made perfect runs irrespective of orientation. During some further training under the initial conditions 3 rats improved considerably with 2 of them showing perfect runs. These 3 rats were subjected to bilateral frontal lobe lesions which destroyed their ability not only to perform double alternation but also to relearn the response. In a final experiment 10 new animals were trained in a shorter maze having only 4 blind alleys, which proved to be easier to learn than the original maze. It is argued that a double alternation maze of the type used cannot be learned on the basis of kinesthetic processes and that one must assume "that the supplementary factor is of a symbolic or central neural character."—*K. F. Muensinger* (Colorado).

512. Husband, R. W. Intercorrelations among learning abilities: III. The effect of length of tests upon intercorrelations. *J. genet. Psychol.*, 1941, 58, 427-430.—The purpose of this study was to check the possibility that length of tests might influence the size of correlation coefficients already established between various learning tasks. The increased length changed the median intercorrelation only from +.13 to +.20. It is concluded that "the length of the test does not influence to any extent the agreement among learning measures."—*F. W. Finger* (Brown).

513. Husband, R. W. Intercorrelations among learning abilities: IV. Effects of age and spread of intelligence upon relationships. *J. genet. Psychol.*, 1941, 58, 431-434.—6 learning tests were given to 53 junior high school students whose IQ's ranged between 81 and 162. The median intercorrelation was +.10. It is concluded that "learning abilities are specific rather than general."—*F. W. Finger* (Brown).

514. James, W. T. An experiment on transfer of a conditioned avoiding reaction under laboratory conditions to a similar situation under kennel conditions. *J. comp. Psychol.*, 1941, 32, 341-351.—2 dogs that had previously been conditioned in the laboratory to respond to a bell signal by raising a foreleg in order to avoid a shock showed a similar behavior when the conditioning procedure was used in the kennel where the animals could run about freely. Here, one dog showed the conditioned response after the 7th, and the other one after the 11th occurrence of bell and shock combined. Both of them stood still while raising the foreleg, although

no restraining harness was used in this situation. When 2 other dogs that had had no laboratory experience were subjected to the same training in the kennel, they responded to the bell signal, after 4 and 5 trials respectively, by conditioned running to escape the shock. In those dogs "in which the natural tendencies had not been modified by training, the initial response was to run."—K. F. Muensinger (Colorado).

515. James, W. T. Experimental observations indicating the significance of work on conditioned motor reactions. *J. comp. Psychol.*, 1941, 32, 353-366.—In studies on conditioned avoidance reactions it has been found that in some dogs the response appears frequently without reinforcement, while in others frequent reinforcements are necessary. The question was therefore raised "as to whether some dogs would exert more energy in order to avoid the shock than others. An apparatus was devised so that the dog was required to pull against a spring to raise the leg and avoid the shock. The first experiments by the use of this pedo-dynamograph showed that there was a difference in the amount of pull the dogs would give to avoid the shock. These differences seem to be related to constitutional types rather than to the size of the animal. The second factor observed was that added energy requirement had a negative effect on the reaction," leading to extinction. The experiments show also "that if a specific behavior is forced to act beyond its capacity the behavior goes through a change suggestive of many of the abnormal behaviors observed in man."—K. F. Muensinger (Colorado).

516. Johnson, D. M., & Reynolds, F. A factor analysis of verbal ability. *Psychol. Bull.*, 1941, 38, 716.—Abstract.

517. Jones, M. M. Changes in the galvanic skin response accompanying reports of changes of meaning during oral repetition. *Psychol. Bull.*, 1941, 38, 740.—Abstract.

518. Melton, A. W. The effect of rest pauses on the acquisition of the pursuitmeter habit. *Psychol. Bull.*, 1941, 38, 719.—Abstract.

519. Morton, N. W. Reciprocity of visual clearness and span of apprehension. *Bull. Canad. psychol. Ass.*, 1941, 1, 37-38.—The relationship was examined in 40 subjects between span of apprehension (number of letters seen on a card exposed for 250 ms.) and clearness (presence of distracting objects of graduated size on the card). Individual correlations between span and clearness ranged between .00 and -.61, with a mean of -.35. It is concluded that "there is a general, though not marked, tendency for the span of apprehension to show an inverse linear association with clearness."—F. W. Finger (Brown).

520. Orata, P. T. Recent research studies on transfer of training with implications for the curriculum, guidance, and personnel work. *J. educ. Res.*, 1941, 35, 81-101. Also *Harvard educ. Rev.*, 1941, 11, 259-278.—This is a review of work done during the

past 6 years and a consideration of the problem of transfer for the present defense program. Evidence accumulated during this period confirms the belief that transfer is fact, that it is not automatic, and that the amount of transfer depends upon many factors. It also tends to disprove the theory of identical elements, and as this theory becomes obsolete the role of insight and generalization becomes more thoroughly established. The theory of transfer as reconstruction of experience has gained support, and studies confirming this theory are reviewed in detail. Inadequacies of transfer studies are pointed out, and there is a bibliography of 196 titles.—M. Murphy (Pennsylvania).

521. Preston, M. G., & Bayton, J. A. Differential effect of a social variable upon three levels of aspiration. *J. exp. Psychol.*, 1941, 29, 351-369.—Between 2 sessions of symbols-digits, cancellation, and addition tasks 30 Negro college men were informed that their average performance for the first session was the same as that made by white college men whose scores allegedly made in a second session was given. 30 control subjects were told that their scores were the same as those made by Negro students in 3 other colleges. Before the second session each subject was asked to predict his likely maximum, minimum, and actual performance. "The present results differ from those obtained by other investigators in that the reliability of the estimates is very high and the degree of generality observed is very extensive." In competing with whites the goal of the Negro students is no different from that prevailing in competition with members of their own group. "However . . . the experimental group were affected by their knowledge of the performance of the white in a manner such as to undermine their confidence in their ability to attain or maintain the standards which operated as their goal."—M. J. Zigler (Wellesley).

522. Ray, W. S. Proactive inhibition as a function of the time interval since learning the first set of material. *Psychol. Bull.*, 1941, 38, 719.—Abstract.

523. Searle, L. V. A study of the generality of inherited maze-brightness and maze-dullness. *Psychol. Bull.*, 1941, 38, 742.—Abstract.

524. Shock, N. W., & Scow, R. O. The effect of repeated exposures to lowered oxygen tensions on learning. *Psychol. Bull.*, 1941, 38, 740.—Abstract.

525. Smith, B. B. The validity and reliability of group judgments. *J. exp. Psychol.*, 1941, 29, 420-426.—This paper is a criticism of Eysenck's (see XIV: 1257) contention that the validity of esthetic judgments increases as the number of judges increases, and that "a general factor of taste is the most important single determinant for individual esthetic preferences." Among the main points criticized are: (1) that the equation utilized by Eysenck was only an approximation, not the full formula; (2) that the approximate form of this equation is valid only when the two-factor theory is applicable, which was not here established; and (3) that, after

all, the formula in question is concerned not with validity but with reliability.—*M. J. Zigler* (Wellesley).

526. Sotobayasi, D. [An experimental investigation of the thought process. I.] *Jap. J. Psychol.*, 1941, 16, 166-175.—Thought processes in the solution of arithmetic, algebra, and geometry problems are analyzed and the concepts of orientation and circulation introduced as tentative principles.—*R. Kuroda* (Keijo).

527. Stone, C. P. Changes in working habits of rats in a sand-digging problem. *Psychol. Bull.*, 1941, 38, 741.—Abstract.

528. Tanser, H. A. Intelligence of Negroes of mixed blood in Canada. *J. Negro Educ.*, 1941, 10, 650-652.—A brief review of several studies concerned with the relationship between intelligence and bloodedness of Negroes is followed by a summary of the writer's findings. Without the support of PE's_{diff}, the writer concludes that the trends toward a positive relationship between amount of white blood and intelligence on the National Intelligence Tests are due to the latter's dependence upon acquired knowledge and school achievement. The inconsistency of the results on the Pinter Non-Language and Pinter-Patterson Performance tests is taken to indicate no relationship between bloodedness and intelligence.—*W. E. Walton* (Nebraska).

529. Tolman, E. C. Instrumental and equivalence beliefs. *Psychol. Bull.*, 1941, 38, 742.—Abstract.

530. Wherry, R. J. Determination of the specific components of maze ability for Tryon's bright and dull rats by means of factorial analysis. *J. comp. Psychol.*, 1941, 32, 237-252.—Using Tryon's data from his analysis of maze components for bright and dull rats (see XV: 774), the author found 3 factors: a forward-going tendency, food-pointing, and goal gradient, with different factor loadings for bright and dull rats. Combining the squares of the factor loadings with assumed alley weights he was then able to predict the errors made in each one of the 17 alleys by the 2 groups of animals during 10 successive periods in the course of learning. The 20 correlations obtained between the theoretical and observed error distributions for the alleys ranged from .92 to .98, which is as good a result as Tryon's earlier prediction based on 10 factors as compared with only 3 factors used in this study. The author's results seem to be "in agreement with Krechevsky's finding that the bright rats tended to make greater use of spatial (interoceptively released) hypotheses, while the dull rats were apt to use visual (exteroceptively released) hypotheses." A high negative correlation between errors per trial and loadings for the goal gradient factor means that "learning was accomplished by the dropping out of such factors as forward-going and food-pointing."—*K. F. Muenzinger* (Colorado).

[See also abstracts 435, 534, 561, 564, 582, 597, 645, 687, 693, 698, 815.]

MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

531. Adolph, E. A. The internal environment and behavior. Part III. Water content. *Amer. J. Psychiat.*, 1941, 97, 1365-1373.—*R. Goldman* (Boston Psychopathic Hospital).

532. Bartlett, F. C. Fatigue following highly skilled work. *Nature, Lond.*, 1941, 47, 717-718.—Most investigators of fatigue from skilled work have attempted to adopt the methods which proved valuable in the study of simple muscular fatigue. The operations in highly skilled work are, on the other hand, marked by complex, coordinated, and accurately timed activities. When the experimental situation is set up so that these considerations have full play, certain characters of fatigue emerge. Errors treated as significant get wider and wider limits. It is far more likely that right reactions will be performed at wrong times than vice versa. Marginal stimuli are ignored, and there is a marked change in the effect of distracting stimuli. Subjective symptoms develop, and the growth of irritability is especially marked.—*N. R. Bartlett* (Brown).

533. Carlson, H. J. Man's body and man's behavior. *Sigma Xi Quart.*, 1941, 29, 170-181.—This is a brief résumé of the information on the nutritive system, the hormone system, and the nervous system. The dominance of the major emotional processes on behavior is indicated.—*N. R. Bartlett* (Brown).

534. Estes, W. K., & Skinner, B. F. Some quantitative properties of anxiety. *J. exp. Psychol.*, 1941, 29, 390-400.—"The magnitude of [anxiety] is measured by its effect upon . . . the rate with which [hungry] rats pressed a lever under periodic reinforcement with food. Repeated presentations of a tone terminated by an electric shock produced a state of anxiety in response to the tone. . . . When the shock was thus preceded by a period of anxiety it produced a much more extensive disturbance in behavior than an 'unanticipated' shock. . . . During experimental extinction of the response to the lever the tone produced a decrease in the rate of responding, and the terminating shock was followed by a compensatory increase in rate which probably restored the original projected height of the extinction curve. The conditioned anxiety state was extinguished when the tone was presented for a prolonged period without the terminating shock. Spontaneous recovery from this extinction was nearly complete on the following day."—*M. J. Zigler* (Wellesley).

535. Geier, F. M. The measurement of tension in the rat. *Psychol. Bull.*, 1941, 38, 743.—Abstract.

536. Gellhorn, E. The internal environment and behavior. Part II. The influence of variations in the blood sugar on the functions of the brain. *Amer. J. Psychiat.*, 1941, 97, 1204-1218.—A series of experiments is reported which "show not only the effects of anoxia and hypoglycemia on the brain which is due to the fact that both procedures diminish its oxidative metabolism, but they seem to

indicate that at a time when the cortical activity is diminished or abolished, the autonomic centers are in a state of increased excitability."—*R. Goldman* (Boston Psychopathic Hospital).

537. Grigorieva, H. I. [Examination of convergence in various directions of fixation.] *Vestn. Oftal.*, 1940, 17, 781 ff.—[Abstracted review; original not seen.] Convergence tested by the Litinski apparatus was found to increase in the lower field, decrease in the upper field; this fact should be observed in the testing of aviators.—*D. J. Shaad* (Lawrence, Kansas).

538. Howard, E. A waterhen's worlds. New York; Cambridge: Macmillan; University Press, 1940. Pp. vii + 84. \$2.50.—[Abstracted review; original not seen.] The author describes 4 worlds or behavior phases associated with the breeding cycle of the waterhen. In chronological order these are: the territory world, the sexual, the platform, and the family. Changes in internal physiological states are related to changes in the bird's activities. The author attributes feelings to the waterhen as concomitants of all activity.—*W. E. Kappauf* (Princeton Experimental Laboratory).

539. Lehmann, G., Straub, H., & Szakáli, A. Pervitin als leistungssteigerndes Mittel. (Increasing performance through pervitin.) *Arbeitsphysiologie*, 1939, 10, 680-691.—(*Biol. Abstr.* XV: 21766).

540. Lovell, G. D. Physiological and motor responses to a regularly recurring sound. *Psychol. Bull.*, 1941, 38, 715.—Abstract.

541. Luchsinger, R. Die Sprache und Stimme von ein- und zweieiigen Zwillingen in Beziehung zur Motorik und zum Erbcharakter. (The speech and voice of one- and two-egg twins in reference to motor mechanism and hereditary character.) *Arch. Klaus-Stift. Vererb. Forsch.*, 1940, 15, No. 4.—[Abstracted review; original not seen.] The voice range (i.e. number of half-tones) was found to be similar for 28 pairs of one-egg twins and quite dissimilar for 11 pairs of two-egg twins, while no characteristic difference was noted in stammering between paired mates of the 2 groups.—*G. C. Schwesinger* (American Museum of Natural History).

542. Machado, N. [Treatment of strabismus.] *Arch. brasil. Oftal.*, 1941, 4, 88-107.—[Abstracted review; original not seen.] Review of the subject in Portuguese.—*D. J. Shaad* (Lawrence, Kansas).

543. McFarland, R. A. The internal environment and behavior. Part I. Introduction and the role of oxygen. *Amer. J. Psychiat.*, 1941, 97, 858-877.—This is an introductory paper of a symposium. "The importance of constancy in the internal environment for the stability and well being of the organism as a whole and the cerebral cortex in particular" is emphasized. Illustrations are cited from studies at high altitude to demonstrate the basic role of oxygen in neural activity. The psychological effects of anoxia in 3 kinds of experiments are briefly discussed: finer tremors and loss of motor coordination, as in handwriting; memory, especially for recent events and using paired associates; and

light sensitivity. Alcohol and oxygen want are briefly discussed. The applications of the observations and findings of studies are discussed in relation to certain mental disorders.—*R. Goldman* (Boston Psychopathic Hospital).

544. Missiuro, W., Niemierko, S., Perlberg, A., & Pawlak, B. Über Kompensationsprozesse im Ruhe- und Tätigkeitszustand bei vermindertem O₂-Druck. (Compensation processes during rest and activity with reduced O₂-pressure.) *Arbeitsphysiologie*, 1939, 10, 561-601.—(*Biol. Abstr.* XV: 21769).

545. Monnier, M. Altérations du système nerveux et des muscles striés chez le rat adulte carencé en vitamine E. (Changes of the nervous system and the striate muscles in E-avitaminotic adult rats.) *Z. Vitaminforsch.*, 1941, 11, 235-258.—Rats were fed a diet free of vitamin E for periods up to 16 months. After 10 months, there appeared psychomotor disturbances such as ataxia, spastic paresis, and disorders of coordination and special sensibility. The syndrome was completed after 14 months. Neurological and muscular changes accompanied these manifestations.—*E. S. Primoff* (U. S. Employment Service).

546. Morell, T. [Combat of fatigue by active substances.] *Dtsch. med. Wschr.*, 1940, 66, 398.—[Abstracted review; original not seen.] To increase performance capacity, the organism must be supplied by way of food with sufficient quantities of biocatalytic agents and energy-producing substances. Morell mentions vitamin C, the B complex, and nicotinic acid as important activators, and dextrose as an important foodstuff; the utilization of the latter is possible only in the presence of physiologically adequate amounts of vitamins B and C. Work tests with a preparation containing these ingredients show that, if it is given during extreme fatigue, performance is greatly increased. He recommends its use during exertions, particularly high altitude flights.—*M. E. Morse* (Baltimore, Md.).

547. Richter, C. P. The internal environment and behavior. Part V. Internal secretions. *Amer. J. Psychiat.*, 1941, 97, 878-893.—It is shown that "rats threatened with dehydration due to the loss of the anti-diuretic hormone from the posterior lobe of the hypophysis maintained a normal internal water balance by drinking large amounts of water; further, that rats threatened with a seriously lowered body temperature following hypophysectomy or thyroidectomy built large nests and thereby conserved their body heat; that rats whose internal salt balance had been disturbed by adrenalectomy drank large amounts of salt solution and thereby kept themselves alive and free from symptoms of insufficiency; that parathyroidectomized rats sought calcium solutions and thus maintained their normal calcium balance; and finally, that pancreatectomized rats, which apparently are unable to utilize carbohydrates, avoided sucrose and ate large amounts of the fat, olive oil, thus freeing themselves from symptoms of diabetes."—*R. Goldman* (Boston Psychopathic Hospital).

548. Richter, C. P., Honeyman, W. M., & Hunter, H. Behavior and mood cycles apparently related to parathyroid deficiency. *J. Neurol. Psychiat.*, 1940, 3, 19-26.—An attempt was made to discover if any endocrine and chemical conditions may be related to the cycloid personality and manic-depressive insanity. A woman of 56 with this disorder was found to suffer from a parathyroid deficiency; abnormal mood variation ceased after calcium therapy was administered. Further studies were made with parathyroidectomized monkeys, and the results were quite similar to those with the human subject.—G. W. Knox (Chicago).

549. Rose, D. Experimentally induced changes in fetal behavior. *Psychol. Bull.*, 1941, 38, 733.—Abstract.

550. Russell, E. S. Biological adaptedness and specialization of instinctive behaviour. *Nature, Lond.*, 1941, 147, 729-734.—Adaptive specialization rules throughout the whole life history of any animal. One aspect of the specialization is the adaptedness of instinctive behavior on the perceptual side. As one example, the author considers in outline the ways in which several insect species contrive to oviposit in the special ecological norm suitable for larval development. He concludes that "each animal species has an innate predisposition to perceive, and act with reference to, particular objects and events, which alone have valence for it." In many cases the suitable object is distinguished by means of only a few of its possible valent characteristics. Because some biologically insignificant objects may possess these same signs, one may expect to find frequent aberrations in instinctive behavior.—N. R. Bartlett (Brown).

551. Schneider, K. Blutgase und Kreislauf bei Arbeit unter der Gasmaske. (Blood gases and circulation during work with the gas mask.) *Arbeitsphysiologie*, 1940, 11, 10-24.—(*Biol. Abstr.* XV: 21779).

552. Škerlj, B. Was ist ein Konstitutionsindex? (What is a constitution index?) *Z. Rassenk.*, 1940, 11, 16-21.—(*Biol. Abstr.* XV: 22052).

553. Snell, G. D. [Ed.] *Biology of the laboratory mouse*. Philadelphia: Blakiston, 1941. Pp. ix + 497. \$7.00.—This treatise deals with the whole of the literature on its subject largely exclusive of anatomical, endocrinological, and behavior data. There is a chapter on reproduction by G. D. Snell; one on care and recording by J. J. Bittner; and one on inbred and hybrid animals and their value for research. This last chapter emphasizes that inbreeding may result in increased rather than decreased variability. Selected bibliographies.—W. S. Hunter (Brown).

554. Toschi, A. La migrazione degli uccelli. (The migration of birds.) Bologna: Editrice Compositori, 1939. Pp. 292. L. 30.—[Abstracted review; original not seen.] A summary of recent research dealing with migration habits of birds, particularly varieties indigenous to Italy.—H. Beaumont (Kentucky).

555. Weber, H. Gaswechseluntersuchungen zur Frage der Dauerleistungsfähigkeit Jugendlicher. I. Mitteilung. (Metabolism investigations regarding performance endurance of adolescents. Part I.) *Arbeitsphysiologie*, 1940, 11, 25-34.—(*Biol. Abstr.* XV: 21785).

556. Wiersma, C. A. G., & Helfer, R. G. The effects of peripheral inhibition on the muscle action potentials of the crab. *Physiol. Zool.*, 1941, 14, 296-304.—The action currents of the opener and the closer muscles of the crab leg were studied under influence of stimulation of prepared single inhibitory axons. The opener receives 1 exciter and 2 inhibitors; stimulation of the "common" inhibitory has no pronounced effect on the muscle action currents, but stimulation of the "true" inhibitor can lead to potential reduction as great as 75% (when the inhibitory impulses arrive at the muscle just before the excitatory). The closer is innervated by 2 motor axons and the "common" inhibitor; no reduction of potentials dependent on arrival time could be obtained.—F. W. Finger (Brown).

557. Young, W. C. Observations and experiments on mating behavior in female mammals. *Quart. Rev. Biol.*, 1941, 16, 135-156; 311-335.—Data on the mating behavior of female mammals are summarized and the experimental investigations dealing with the factors involved in the induction and regulation of this behavior reviewed. Behavior patterns at the time of estrus are described for the rat, guinea pig, and rabbit; sheep, cattle, pigs, and horses; the cat and the dog; the howler monkey, Rhesus monkey, and chimpanzee. Each species is found to display a characteristic form of behavior. Variation within a given species is greatest for the infra-human primates. The factors considered in relation to these behavior patterns and their variation are the ovarian and other hormones, ovarian condition, neural factors, differences in sensitivity to estrogen-action, and environmental or social influences. A comprehensive bibliography is appended.—W. E. Kappauf (Princeton Experimental Laboratory).

[See also abstracts 409, 434, 439, 442, 458, 467, 474, 484, 491, 503, 509, 517, 524, 580, 584, 588, 593, 605, 612, 613, 614, 628, 733, 778, 794, 805, 811, 824, 826.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

558. Adler, G. Study of a dream. A contribution to the concept of the collective unconscious and to the technique of analytical psychology. *Brit. J. med. Psychol.*, 1941, 19, 56-72.—The dream studied appeared after 3 months of analysis. Leaving a boring party, the patient finds himself (in the dream) entering an adjoining room in which there is a toy teddy bear and a small toy wolf. The patient picks up the wolf and makes it scratch the teddy bear, when both come alive and the wolf escapes and runs outside, where the dreamer fears it is likely to grow into a large and dangerous animal. Someone says that the dreamer is experiencing the primeval

giant serpent, encircling the world. After recounting the dream the patient is unable to find associations, but adopts the suggestion of the analyst to attempt drawing. The series of drawings which result are reproduced. The dream is interpreted in terms of 3 levels, the boring party representing the conscious level (ego), the animal scene representing the instinctive level (personal unconscious), the serpent portion representing a more universal situation (collective unconscious). The drawings are interpreted coherently with the dream.—*E. R. Hilgard* (Stanford).

559. **Bartemeier, L. H.** *Micropsia*. *Psychoanal. Quart.*, 1941, 10, 573-582.—Detailed discussion is given of an instance of micropsia constituting a hysterical conversion symptom originating in the prolongation of the nursing period and subsequent inability to express adequately intense aggressions. During analysis this neurotic manifestation was found to be utilized by the patient as a compromise formation between aggressive tendencies and defenses against them.—*M. H. Erickson* (Eloise Hospital).

560. **Baudouin, C.** *Suggestion et autosuggestion*. (Suggestion and autosuggestion.) (5th ed.) Neufchâtel: Delachaux, 1940 [?]. Pp. 264. Fr. 5.50.—[Abstracted review; original not seen.] Suggestion is defined as the realization of an idea, and is, in final analysis, always autosuggestion. The first part of the book discusses the factors of suggestion (attention, effort, emotion, conviction, social factors, sleep, training, habituation) and various forms of suggestion; in the second part, applications and conclusions are offered.—*H. Beaumont* (Kentucky).

561. **Cass, W. A.** *An experimental investigation of the dissociation hypothesis, utilizing a post-hypnotic technique*. *Psychol. Bull.*, 1941, 38, 744.—Abstract.

562. **Dreyfuss, D. K.** *Zur Theorie der traumatischen Neurose*. (A contribution to the theory of traumatic neurosis.) *Int. Z. Psychoanal. Imago*, 1941, 26, 122-141.—In traumatic neuroses regression releases sexual complexes which provide the symptoms of the disorder through spontaneous cathartic activity. The usual analytic procedure of making subconscious material conscious and enabling the ego to deal with it directly, does not apply here so much because the manifest causes of traumatic neuroses occur mainly outside the patient's personality structure. An attempt should be made to connect split-off affective materials with his experiential content, much of which must take place in the realm of his fore-conscious.—*H. Beaumont* (Kentucky).

563. **Eisenbud, J.** *Negative reactions to Christmas*. *Psychoanal. Quart.*, 1941, 10, 639-645.—2 instances are reported of individuals who consistently reacted negatively to the Christmas holiday instead of showing the customary tendency to gratify infantile wishes and to relax the superego. Psychoanalysis disclosed these negative reactions to be the outcome of early traumatic experiences of

frustration and disappointment in direct connection with Christmas.—*M. H. Erickson* (Eloise Hospital).

564. **Ellson, D. G.** *A further analysis of hallucinations produced by sensory conditioning*. *Psychol. Bull.*, 1941, 38, 745.—Abstract.

565. **Erickson, M. H., & Kubie, L. S.** *The successful treatment of a case of acute hysterical depression by a return under hypnosis to a critical phase of childhood*. *Psychoanal. Quart.*, 1941, 10, 583-609.—An acute hysterical depression was precipitated in a young woman by a proposal of marriage. This depression proved unresponsive to psychotherapy including psychoanalysis. Under hypnosis she was "regressed" to the childhood period of life between 10 and 13 years as a measure of exploring the remote emotional background of her illness. This was found to be serious misconceptions of sex instilled in her at that time by her now dead mother. By means of a series of "regressive" trances, ordinary trances, waking states, and repetition procedures these childhood misunderstandings, inhibitions, and repressions were corrected, and the patient was enabled to develop sufficiently adequate unconscious insight into her problem to make a full recovery. Throughout the article critical contrasts and parallels are drawn with psychoanalytic theory and practice.—*M. H. Erickson* (Eloise Hospital).

566. **Foulkes, S. H.** *Some remarks on a chapter of Helen Keller's book: "The world I live in."* *Psychoanal. Rev.*, 1941, 28, 512-519.—Chapter 11, before the soul dawn, supports the following conclusions: (1) "The development of the ego and the conception of the outside world are inseparable;" (2) "word formation seems . . . to represent a highly important stage in development;" (3) "actual memory seems to comprise a repetition of the impressions at the time of the experience;" (4) "the . . . libido follows originally the instinctive needs of the ego as pointed out by Freud."—*G. Brighouse* (Occidental).

567. **Foxe, A. N.** *Poe as hypnotist*. *Psychoanal. Rev.*, 1941, 28, 520-525.—Edgar Allen Poe described hypnotism with accuracy recognizing it as a pathological state and regarding death as a normal phenomenon. He vividly described in his writings 2 experiments in which he hypnotized dying men. "Unless one is horrified, one is left a little disappointed from the scientific point of view, not in the ready admission of the fictional element, but that Poe did not enter the field of science where his psychological gifts and uncanny insight might have given us so much sound discovery rather than rich pleasure."—*G. Brighouse* (Occidental).

568. **French, T. M.** *Physiology of behavior and choice of neurosis*. *Psychoanal. Quart.*, 1941, 10, 561-572.—Remarking on the repeated observation that a dream will frequently anticipate the onset of a somatic symptom or even of an organic illness, the author reports his preliminary findings that a systematic study of the dreams of analytic patients will disclose that the manifest content of such dreams may be a valuable indicator of physiological excita-

tions and tensions corresponding to the wishes and impulses of which the dreams are an expression. Also he finds that the dream work may actually be started by the physiological excitations associated with wishes stirred up in the analytic situation itself. Additionally, he notes that there can be a detection of shifts in the patterns of physiological tensions that have taken place during the dream work. Illustrative material from analytic sessions is cited in support of this relationship between dream content and physiological manifestations.—*M. H. Erickson* (Eloise Hospital).

569. Gorer, G. The myth in Jane Austen. *Amer. Imago*, 1941, 2, 197-204.—In 4 novels (*Sense and sensibility*, *Pride and prejudice*, *Mansfield Park*, *Emma*) Jane Austen exposes passionate love and repeats almost obsessively her central theme of a girl who hates her mother, is momentarily attracted by a charming but worthless lover, and marries a father-surrogate. Her last novel (*Persuasion*) rejects this personal myth, bitterly depicts the father as vain, proud, and selfish, and in its emotional intensity suggests a deeply personal motivation.—*W. A. Varvel* (Texas A. & M.).

570. Isaac-Edersheim, E. Messias, Golem, Ahasver. Drei mythische Gestalten des Judentums. II. Der Golem. (Messiah, Golem, Ahasver. Three mythical figures of Judaism. II. The Golem.) *Int. Z. Psychoanal. Imago*, 1941, 26, 179-213.—Golem is the god of the story of creation, all-powerful, all-wise, invisible; but his demonic powers are tempered by his coarseness and servility whereby he is reduced to a lifeless colossus of clay. This illustrates once more the mechanism of conversion and wishfulfillment: the god who created man weak and sinful, condemned him to mortality, often treats him sternly, and exposes him to all sorts of privations, now is turned into a mortal and incomplete being by a myth which, however, leaves him a few traits by which his original supernatural position can be recognized. Again, the deity is created in the image of man. While the Messiah (see XV: 4640) remains alive in the heart of man, man's phantasy creates the Golem as a symbol of his dualism.—*H. Beaumont* (Kentucky).

571. Levi, K. Über die Entstehung des Phantomgliedes. (Origin of the phantom limb.) *Mtschr. Psychiat. Neurol.*, 1941, 104, 62-77.—Levi discusses the roles of peripheral, central, and psychogenic factors in the origin of phantom limbs. The unchanged body schema is the central factor, in which are incorporated the peripheral sensations, and from which the phantom limb is projected. There is a special psychic attitude toward the lost member. In spite of superficial acceptance, the patient's dreams and injuries incurred by "forgetting" the absence of the member prove that he is unconsciously unreconciled. Whenever conscious control is relaxed, the unconscious factor predominates. Only parts of the body in which the receiving part itself participates in the sensation can give rise to phantoms. Hence phantoms occur only in the extremities and particularly in the distal parts thereof,

where readiness for impressions is highest. Hence the distal part of the phantom is the last to disappear, and this accounts for the illusion that the limb is becoming progressively shorter.—*M. E. Morse* (Baltimore, Md.).

572. Masserman, J. H. Psychodynamisms in manic-depressive psychoses. *Psychoanal. Rev.*, 1941, 28, 466-478.—According to Abraham, melancholia is marked by a regression to the expulsive phase of anality in which the love object is ejected; the love object is then reintegrated through scopophilic fantasy, after which there is further regression to the biting stage of oral libidinal organization. Abraham calls the dynamism of melancholia an "expulsive-incorporative-digestive-expulsive sequence" which composes a psychological metabolism. Psychological metabolism is expedited when mania follows the final re-expulsion of the love-object. Abraham has a tendency to sacrifice clarity to a symmetrical and complete theoretical pattern; his cases are not always completely formulated. Definitions are not always clear. He does not distinguish between euphoric mania and defensive, anxiety driven mania. Further comments are made on the works of Freud, Helen Deutsch, Fenichel, Marjorie Brierly, and Rado. Suggestions for further research are formulated.—*G. Brighthouse* (Occidental).

573. Miller, M. L., & McLean, H. V. The status of the emotions in palpitation and extrasystoles with a note on 'effort syndrome.' *Psychoanal. Quart.*, 1941, 10, 545-560.—After noting briefly the literature bearing upon cardiac disturbances deriving from emotional stress, the authors cite briefly 4 case histories from their own practice. They note as the outstanding features in all cases that the symptomatology was patterned after parental disabilities and that it always appeared at a time in the analytic situation when defenses had been worked through and a strong competitive attitude toward the parent of the same sex appeared. As the analysis progressed the patient was impelled toward a more active and aggressive attitude, thereby developing guilt which in turn led to self-punishment by cardiac symptomatology and the development of fear of losing parental love. A 19-item bibliography is given.—*M. H. Erickson* (Eloise Hospital).

574. Röheim, G. Myth and folk-tale. *Amer. Imago*, 1941, 2, 266-279.—In central Australia the author finds a clear distinction between myth and folk-tale. "A folk-tale is a narrative with a happy end, a myth is a tragedy; a god must die before he can be truly divine." The 2 differ in ontogenetic level. The myth is only conceivable on a superego level. "In the folk-tale we relate how we overcome the anxiety connected with the 'bad parents' and grew up; in myth we confess that only death can end the tragic ambivalence of human nature."—*W. A. Varvel* (Texas A. & M.).

575. Sterba, R. A Dutch celebration of a festival. *Amer. Imago*, 1941, 2, 205-208.—In an unconscious recognition of their common significance, the Church

has celebrated the stoning of St. Stephen and the slaughter of the Innocents in close proximity to the birth of Christ. A parallel is found between the holy story and the myth of Oedipus. Folk customs in the festival of the Innocents support this parallel. St. Stephen, Christ, and the Innocents all expiated in their sacrificial deaths a rebellion against a father figure.—*W. A. Varvel* (Texas A. & M.).

576. Velikovsky, I. The dreams Freud dreamed. *Psychoanal. Rev.*, 1941, 28, 487-511.—Interpretation of Freud's dreams by analysis of plays on words indicates that he was torn between the desire to remain a Jew and his wish for success and the welfare of his children, which might be brought about through conversion.—*G. Brighouse* (Occidental).

577. White, R. W. A preface to the theory of hypnotism. *J. abnorm. soc. Psychol.*, 1941, 36, 477-505.—Hypnotism is called upon to explain the following facts: (1) that the hypnotized person can transcend the normal limits of volitional control, (2) that he behaves without the experience of will or intention, without the self-consciousness, and without the subsequent memory which under the circumstances one would expect, and (3) that these changes in his behavior occur merely because the hypnotist says so. It is proposed that hypnotic behavior be regarded as a meaningful, goal-directed striving, its most general goal being to behave like a hypnotized person as this is continuously defined by the operator and understood by the subject. Hypnotic transcendence of the usual boundaries of volitional control consists of a roughly measurable pushing out of those boundaries in certain directions rather than a capricious disregard for their existence. As one passes from semi-voluntary functions to completely involuntary acts, the effects of hypnotic suggestion grow smaller. The 2 factors which appear to be common to all hypnotic techniques are (1) relaxation and a reduction of sensory input, and (2) the presence of an operator who administers the suggestions.—*C. H. Johnson* (Portland, Ore.).

578. Wilbur, G. B. Some problems presented by Freud's life-death instinct theory. Cont. III. *Amer. Imago*, 1941, 2, 209-265.—This continuation of a previous paper (see XV: 4649) develops the argument that Freud's life-death instinct theory was implicit in the initial hypotheses elaborated as a result of the investigation of dreams. An attempt is made to make explicit the postulate system of the early psychoanalysis. The death instinct was inferred from a restatement of the basic stability principle. Freud's repetition compulsion can be related to Cannon's homeostasis principle. One mode of expression of the principle of a steady state, its tendency to gain autonomy for the organism, can if it proceeds to an extremity result in cutting an organism away from its source (external world) and so merit the name death instinct. Reference is here made to the concept of narcissism and to the function of a dream. The more nearly complete the wish-fulfillment provided by the dream, the more fatal will be the consequence. If the dream object is inadequate, the vital need will continue.

This surplus of instinctual energy can be equated with aggression.—*W. A. Varvel* (Texas A. & M.).

579. Wulff, M. Über einen Fall von männlicher Homosexualität. (A case of male homosexuality.) *Int. Z. Psychoanal. Imago*, 1941, 26, 105-121.—A case of male homosexuality resulting from the fact that the patient's mother had died early and his father had replaced her as an erotic object in the son's Oedipus complex.—*H. Beaumont* (Kentucky).

[See also abstract 679.]

FUNCTIONAL DISORDERS

580. Angyal, A., & Blackman, N. Paradoxical vestibular reactions in schizophrenia under the influence of alcohol, of hyperpnea and CO₂ inhalation. *Amer. J. Psychiat.*, 1941, 97, 894-903.—After a preliminary exploration with sodium amytal, cocaine, benzedrine sulphate, caffeine, alcohol, and increased and diminished CO₂ tensions, the last 3 conditions were selected as the most informative in comparing the nystagmic reactions to caloric stimulation in schizophrenics and in normal individuals. The normals showed an increase, and the patients a decrease in the number and frequency of nystagmus under the influence of alcohol and during hyperpnea. CO₂ depresses the nystagmic reaction of normals.—*R. Goldman* (Boston Psychopathic Hospital).

581. [Anon.] Selective service psychiatry. *Psychiatry*, 1941, 4, 440-464.—This editorial is an extract from the annual report of its president to the board of trustees of the William Alanson White Psychiatric Foundation, bearing on its loaning to National Headquarters, Selective Service System, the services of H. S. Sullivan in addition to other activities. A systematic review is given of the significant events dating from the World War that have led to the present stage of development of Selective Service psychiatry and of present difficulties and of existing measures for meeting them. Emphasis is placed upon the need for increasing practicality in measures for determining the mental health of registrants, and report is given of a special procedure of examination now being carried on in the District of Columbia. It is concluded that "if data of registrants' personal history are assembled on the initiative of Local Boards and supplied to the Army examining boards; if the psychiatrist or psychiatrists on these boards have opportunity to study each registrant for an average of fifteen minutes; and if the psychiatric work is both supervised and adequately utilized in the final classification of selectees; the personnel inducted for training and service under this and other plans for the single examination should be satisfactory."—*M. H. Erickson* (Eloise Hospital).

582. Baldrian, K. [Relation between thought and language in normal persons, feeble-minded, and deaf mutes.] *Arch. ges. Psychol.*, 1940, 105, 478ff.

583. Bartemeier, L. H. Schizoid personality and schizophrenia. *War. Med.*, Chicago, 1941, 1, 675-

681.—Bartemeier concentrates on the clues to dissociation as observable by the draft physician (localized tensions and twitchings, unwitting movements, stony calm or unpleasant overfriendliness, extreme seriousness, caution, obscure misunderstandings) and the obscure antagonism which the schizoid registrant arouses in the examiner. The most important thing is to discover what the registrant thinks about himself. The schizoid type of boy is often sent to military school. In the army he is an easy mark and becomes more seclusive or develops panic.—*M. E. Morse* (Baltimore, Md.).

584. Benda, C. E. Life span. *Proc. 7th Inst. except. Child, Child Res. Clin.*, 1940, 55-61.—The effects of pre-natal conditions and birth injuries are discussed in relation to later development. There is then given a summary of life expectancy in various forms of mental deficiency. Morons and imbeciles have approximately normal life expectancy. Those with mental deficiency associated with mongoloidism or birth injury have a much shorter life span. This does not hold for birth injury cases with outstanding neurological symptoms (e.g. paresis) but relatively high intelligence.—*F. W. Finger* (Brown).

585. Brown, J. F. Social science and psychiatry. *Amer. J. Orthopsychiat.*, 1941, 11, 628-634.—After describing the good society of the future, the author formulates some of the chief limiting principles in psycho-dynamics and socio-dynamics. He discusses questions in connection with the following concepts: the inevitability of inequality, the psychobiological nature of man, the sociological nature of groups, the personality of leaders, and the continuance of resentment.—*R. E. Perl* (Jewish Board of Guardians).

586. Burt, C. Sjaelelige forstyrrelser hos børn og unge. (Mental disturbances in children and adolescents.) Stockholm: E. Munksgaards, 1941. Pp. 331. Kr. 10.50.—[Abstracted review; original not seen.] Translation of *The subnormal mind* (see X: 5432).—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

587. Caldwell, J. M., Jr. Schizophrenic psychoses; report of 100 cases in the U. S. Army. *Amer. J. Psychiat.*, 1941, 97, 1061-1072.—The cause of the psychoses was not found in any demands of the service. "However, the change from a familiar to an unfamiliar environment, with added stresses and strains, probably plays a part in bringing latent trends to the surface."—*R. Goldman* (Boston Psychopathic Hospital).

588. Carmichael, H. T., Noonan, W. J., & Kenyon, A. T. The effects of testosterone propionate in impotence. *Amer. J. Psychiat.*, 1941, 97, 919-943.—Results vary with individuals and individual conditions. "The depth and degree of neurotic conflicts present in the individual may play an important role in determining the nature of the results."—*R. Goldman* (Boston Psychopathic Hospital).

589. Crichton-Miller, H. Somatic factors conditioning air-raid reactions. *Lancet*, 1941, 241, 31-34.—While "pure blast concussion has no psychogene-

sis," the symptoms developing in a particular case will depend not only on the mechanical effects of the blast on the central nervous system "but on the psychological state of the patient when the blast knocks him out. . . . If the patient has also been wounded, he will probably get rest enough to cure the effects of the blast concussion. If not, he may feel loss of prestige in being disabled without trauma; the worst effects of blast concussion are seen in the unwounded. Fatigue, age, the biological epochs, arterial degeneration, and an abnormal sexual and emotional life are factors influencing recovery. . . . Pathological factors affecting recovery . . . include: extreme exhaustion; anemia and consequent anoxaemia; frustration—with resultant anxiety—of instinctive impulses towards aggression, flight, or an appeal for protection."—*C. K. Trueblood* (Cambridge, Mass.).

590. Curran, D., & Mallinson, W. P. War-time psychiatry and economy in man-power. *Lancet*, 1940, 239, 738-743.—The authors report results of an investigation made "into the incidence of different forms of psychiatric disorder in 100 admissions to the neuro-psychiatric unit of a naval auxiliary hospital. The proportion of breakdowns which might have been predicted by previous psychiatric examination has been estimated at 39%. . . . Valuable man-power might be economized by getting a fuller history from recruits, arranging for psychiatrists to interview unsatisfactory recruits in training establishments, excluding mentally defective men by the use of group tests, and instituting tests of personal aptitude. Some patients who have broken down give good service on shore duty if not fit for full duty. Others might be drafted to rehabilitation camps, or given further treatment at psychiatric clinics which should be made available for invalided naval ratings. A report should be sent to the labor exchange with patients invalided out of service, so that they may be found appropriate work."—*C. K. Trueblood* (Cambridge, Mass.).

591. Daniels, G. E., & Tauber, E. S. A dynamic approach to the study of replacement therapy in cases of castration. *Amer. J. Psychiat.*, 1941, 97, 905-918.—Pre- and post-operative personality study and observation should precede replacement therapy. Psychotherapy alone may enhance sexual expression in castrates; in some cases combined psychotherapy and replacement therapy is indicated. "Replacement therapy under psychiatric observation stimulates dream production, which furnishes a valuable check on treatment and suggests a new approach to the study of dream symbolism."—*R. Goldman* (Boston Psychopathic Hospital).

592. Doll, E. A. Department of research. Annual report, 1940-1941. *Train. Sch. Bull.*, 1941, 38, 120-127.—The staff continued research on the social maturity scale. A study of motor coordination was completed, which brought out significant differences between endogenous and exogenous types of mental deficiency. The population was surveyed to determine the number of feeble-minded children whose parents at one time had been inmates

of institutions for the feeble-minded. Preliminary experimentation in measurement was begun by making casts of certain physical features of feeble-minded subjects. In a number of instances the department shared in preparations for national defense. 592 case studies were completed. Staff publications numbered 7 articles with an equal number of manuscripts awaiting publication.—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

593. Duff, P. B. E., & Dingee, R. W. The incidence of consanguineous parentage in mentally defective patients. *Amer. J. ment. Def.*, 1941, 46, 21-25.—"Defectives at the Ontario Hospital, Orillia, born of consanguineous unions show the same trend in sex difference, that is, a greater percentage of males, as is shown in the general hospital population. The incidence of mongolism is proportionately less among cases with related parents than in the general hospital population, while the incidence of spastic paralysis and endocrine dystrophy is proportionately greater. Idiots have related parents more often than would be expected from their numerical representation in the institution."—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

594. Frank, L. K. Social order and psychiatry. *Amer. J. Orthopsychiat.*, 1941, 11, 620-628.—Psychiatry's contribution to the alleviation of national and international difficulties must involve a critical examination of our cultural traditions in terms of what they mean to the individual personality and to the group life. Psychiatry can assist in creating the agency through which a society can continually evaluate its culture and its social institutions. It must concern itself with education, with teacher training, with social welfare work, with law courts, with journalism, with theological schools, and with all areas where the culture and personality viewpoint can contribute to social well-being.—*R. E. Perl* (Jewish Board of Guardians).

595. Gentry, E., & Dunlap, K. An attempt to produce "neurotic" behavior in rats. *Psychol. Bull.*, 1941, 38, 742.—Abstract.

596. Giehen, G. Die seelische Erkrankung der Frau. (Mental disorders of the wife.) *All. Z. Psychiat.*, 1940, 115, 51-104.—Giehen studied the husbands of 420 wives suffering from hysteria, depression, neurasthenia, and obsessive neurosis. The methods used were the history, association and Rorschach tests, dream analysis, and *Weltanschauung*. 161 of the husbands were mentally or physically abnormal. Anxious, agitated personalities predominated, particularly among the husbands of hysterical and obsessive wives. An additional cause of hysteria in the wife is the neurasthenic or matter-of-fact husband. The brutal psychopath and the chronic invalid are the most common types among the husbands of depressed women. When the husband's attitude or the home situation could be improved, the wife's condition was gradually alleviated.—*M. E. Morse* (Baltimore, Md.).

597. Gilliland, A. R. The nature of mental deterioration in certain psychoses. *Psychol. Bull.*, 1941, 38, 715.—Abstract.

598. Groves, C. Get more out of life. New York: Association Press, 1941. Pp. 136. \$1.25.—A book of commonsense advice on how to enjoy a more satisfying life through a better personality adjustment.—(Courtesy *Publishers' Weekly*).

599. Hegge, T. G. Psychology in the field of mental deficiency. *Amer. J. ment. Def.*, 1941, 46, 46-47.—Much can still be done in preparing the future psychologist for work in the field of mental deficiency. "Whether or not the science and practice of psychology are going to influence developments in the field of higher grade mental deficiency to the fullest extent of their potentialities depends, first, on the training given in universities and through interne programs and, second, on the working conditions and responsibilities given the psychologist by organizations in the field."—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

600. Hemphill, J. K., & Kelly, G. A. A comprehensive plan for case summaries. *Psychol. Bull.*, 1941, 38, 715.—Abstract.

601. Hemphill, R. E., & Stengel, E. A study of pure word-deafness. *J. Neurol. Psychiat.*, 1940, 3, 251-262.—The authors describe a patient having pure word-deafness and an asymbolia for pain, resulting from a head injury. The relationships between these 2 conditions are discussed from the standpoint of a disturbed adjustment of the individual to his environment and from the standpoint of possible neural localizations. Pure word-deafness is then considered in relation to the larger, more inclusive category of aphasia.—*G. W. Knox* (Chicago).

602. Herzberg, A. Short treatment of neuroses by graduated tasks. *Brit. J. med. Psychol.*, 1941, 19, 19-36.—The persistent headache of a young woman was cured by finding a task (as a speaker in the "Free-Thinker" movement) which removed her inhibiting feelings of inferiority. Another young woman's agoraphobia was improved by the fulfillment of a series of graduated tasks (beginning by walking around the park, later around a block of houses, and so on), the tasks being directed towards the removal of the gains from her symptoms. Of 100 cases of neuroses and perversions, 48 were cured or very much improved, 47 broke off treatment early (3-39 interviews) with improvement evident for 12, while for 5 cases treatment appeared ineffective and was terminated by the therapist after 24-68 interviews. Hints about the technique of treatment by tasks are given.—*E. R. Hilgard* (Stanford).

603. Hoch, P., & Rachlin, H. L. An evaluation of manic-depressive psychosis in the light of follow-up studies. *Amer. J. Psychiat.*, 1941, 97, 831-843.—In the examination of 5799 records it was found that 415 cases of schizophrenia were originally and often repeatedly diagnosed as manic-depressive psychosis. Every 13th case of schizophrenia had originally been diagnosed as manic-depressive psychosis. Review of New York State and Federal statistics shows marked fluctuation in the number of manic-depressives as compared with dementia praecox and in

relation to total admissions and complete reversal of the general trend in some states. Special case studies reveal that errors in diagnosis result from the failure to apply the established criteria of symptomatology.—*R. Goldman* (Boston Psychopathic Hospital).

604. Humphrey, G. Experiments on the physiological mechanism of noise-induced seizures in the albino rat. *Bull. Canad. psychol. Ass.*, 1941, 1, 39-41.—The frequency of audiogenic seizures was increased by the parasympathetic excitant eserine and decreased by the parasympathetic depressant atropine. More detailed pharmacological evidence, however, leads the writer to conclude that "events occurring in the parasympathetic nervous system are not a determining cause of seizures." Since "attacks were increased by stimulation of the . . . parasympathetic branch" which opposes the sympathetic (theoretically allied to 'emotional' behavior), the question is raised whether or not the audiogenic seizure should be classed as emotional. It is thus possible that "emotion may precipitate a violent reaction which is not in itself to be classed as emotional."—*F. W. Finger* (Brown).

605. Humphrey, G., & Marcuse, F. Factors influencing the susceptibility of albino rats to convulsive attacks under intense auditory stimulation. *J. comp. Psychol.*, 1941, 32, 285-306.—This is largely a repetition of an earlier experiment in which acute attacks in rats were produced by the ringing of an electric bell, and chronic disorders, by moving a food box at the end of a maze along a floor and making a scraping noise. After a week's rest the effects of this last condition had worn off as shown by a decrease in time and errors in the maze. Susceptibility to acute attacks was increased when the rats had previously been subjected to chronic disorders in the manner described. Tamed animals were relatively immune to attacks, while untamed ones showed a high frequency of attacks. Other factors which seem to diminish susceptibility to acute attacks are adaptation to a repetition of bell stimuli, and exercise in an activity wheel.—*K. F. Muensinger* (Colorado).

606. Inman, W. S. The couvade in modern England. *Brit. J. med. Psychol.*, 1941, 19, 37-55.—The couvade is the ceremony among primitive peoples in which the pains of the mother in labor are transferred to the father. Styes and cysts of the eyelid are said to represent a contemporary form of the couvade, since they are found to be associated with interest in childbirth. Of 158 cases suffering from eye diseases, exceptional interest in childbirth was acknowledged by 92% of those with styes, by 80% of those with tarsal cysts, but by only 24% of the others. The relationship between styes, cysts, and interest in childbirth is illustrated through several case studies.—*E. R. Hilgard* (Stanford).

607. James, G. W. B. Anxiety neurosis. *Lancet*, 1940, 239, 561-564.—The author conceives of anxiety neurosis "as a vicious psychosomatic circle which, once started, acquires a momentum of its

own. It begins in the environment by some threat, real or imagined, to an instinctive need, which may be sexual, economic, or even national. The environmental factors are appreciated and reacted to by the central nervous system. The autonomic system is next. . . . Then come the endocrine glands, of which the adrenals, pituitary, and thyroid are of special importance. . . . The chemistry of the tissues is altered by autonomic impulses. We then come to the various somatic systems and symptoms arranged in order: the muscular system, the head as a whole, bodily fatigue, loss of body-weight, dreams, and insomnia. We return to the environment by way of various disturbances of conduct, and the whole cycle begins again. . . . Treatment consists of a systematic attack on this circle."—*C. K. Trueblood* (Cambridge, Mass.).

608. Jung, C. G. Die Psychotherapie der Gegenwart. (Psychotherapy of the present time.) *Z. Kinderpsychiat.*, 1941, 8, 93-94.—Abstract.

609. Katz, H. Untersuchungen an insulinbehandelten Schizophrenen mit dem Rorschach'schen Formdeutversuch. (Studies on insulin-treated schizophrenics with the Rorschach test.) *Msschr. Psychiat. Neurol.*, 1941, 104, 15-33.—Katz's studies are based on 149 protocols from 113 insulin-treated patients. The chief schizophrenic characteristics in the Rorschach test are: deficient grasp of form (the most frequent), original answers, numerous anatomical and color answers, peculiar detail, and delusional ideas. In the great majority of cases, the clinical course and changes in the test run parallel. In others, although clinically "cured" by insulin, schizophrenic signs in the test are still apparent. The so-called complete remissions after insulin are not a *restitutio ad integrum* and are not essentially different from spontaneous remissions. No prognostic conclusions can be drawn from the test. Improvement in the test is evidenced by the even decline of the above signs. The delusional quality of the ideas fades, although they are still recognizable as complexes peculiar to the "cured" individual. The number of movement answers remains unchanged.—*M. E. Morse* (Baltimore, Md.).

610. Katzenelbogen, S. Iatrogenic factors in diseases. *Dis. nerv. Syst.*, 1941, 2, 342-345.—Iatrogenic diseases ("functional disorders of psychogenic origin in the causation of which the physician himself is to be blamed") are discussed in the light of the effects of casual remarks by physicians to their patients. Case reports are presented which show that such incautious remarks are remembered and acted upon by the patient. General psychiatric descriptive terms are likely to be accepted by the patient as disease entities. The purpose of the paper is not to call attention to iatrogenic diseases, which are already well recognized, but to point out that such diseases are still being needlessly fostered and spread.—*C. E. Henry* (Western Reserve).

611. Maier, N. R. F., & Klee, J. B. Studies of abnormal behavior in the rat. VII. The permanent nature of abnormal fixations and their relation to

convulsive tendencies. *J. exp. Psychol.*, 1941, 29, 380-389.—Rats which had manifested position habit fixations in a frustrating discrimination problem evinced these fixations during an additional battery of tests. Rats which lacked position habit fixations did not develop fixations during the present series of tests, and had more than twice as many neurotic attacks in tests involving jumping to the negative card as had the animals which possessed position fixations. The fixation was believed to provide some kind of adjustment to the conflict situation. Metrazol, administered intraperitoneally, often produced convulsions, but had no effect upon fixations or abortive jumping, nor did it modify the behavior of the animal in the jumping apparatus. However, 2 rats which had not previously manifested attacks, did so after metrazol administration. Metrazol also increased the total frequency of the seizures. The drug was believed to make the animal more susceptible to certain auditory irritants, due to increased reflex sympathetic excitability which Gellhorn and Darrow observed.—*M. J. Zigler* (Wellesley).

612. Maier, N. R. F., Sacks, J., & Glaser, N. M. Studies of abnormal behavior in the rat: VIII. The influence of metrazol on seizures occurring during auditory stimulation. *J. comp. Psychol.*, 1941, 32, 379-388.—30 rats "which showed no tendency to react abnormally to the jingling of keys were used in the present experiment. By previously injecting them with a sub-convulsive dose of metrazol, 23 of them were caused to exhibit the characteristic abnormal reaction when subjected to the jingling of keys. The key stimulation, however, did not tend to precipitate a metrazol convulsion." "This means that the abnormal reaction is a functional rather than a structural characteristic. . . . The metrazol produced no permanent modification, but acted merely as a means for producing a temporarily altered physiological state. The tendency to react abnormally to auditory stimulation, therefore, seems to depend upon the arousal of certain physiological tendencies, and these are more available in one condition than in another. The possibility that the abnormal pattern is a reflex reaction of animals which are specifically sensitive to high pitches seems to be excluded since there is no reason to believe that metrazol alters the auditory mechanism."—*K. F. Muenzinger* (Colorado).

613. Marcuse, F., & Moore, A. U. Heart rate and respiration preceding and following audiogenic seizures in the white rat. *Proc. Soc. Exp. Biol.*, N. Y., 1941, 48, 201-202.—A decrease in heart rate, variability of respiration, and an increased range of indices following seizures are indicated.—*H. Peak* (Randolph-Macon).

614. McMenemey, W. H. Dementia in middle age. *J. Neurol. Psychiat.*, 1941, 4, 48-79.—The author reviews various causative factors of presenile dementia. The discussion includes Huntington's chorea, Creutzfeldt-Jakob's disease, aneurysm, trauma, syphilis, arteriosclerosis, and brain tumors. In brain tumors, some of the mental symptoms are

due to the tumor directly while others are due to the increased intracranial pressure resulting from the tumor. The awareness of the condition may induce anxiety. The pre-psychotic personality contributes to the symptom pattern resulting from the tumor.—*G. W. Knox* (Chicago).

615. Merchant, F. C. The place of psychodrama in training the clinician. *Psychol. Bull.*, 1941, 38, 748.—Abstract.

616. Morgan, C. T. The latency of audiogenic seizures. *J. comp. Psychol.*, 1941, 32, 267-284.—This study "was undertaken in the belief that the determination of the way in which the latency of the audiogenic reaction varies with changes in experimental conditions would reveal something of the character of underlying psychological events." By latency is meant the time elapsing between the start of the auditory stimulus and the instant at which the rat bursts into violent running movements. The frequency of the attacks decreased with the intensity of the stimulus which was placed at different distances from a wire mesh cage in which the animal was observed. But no relationship between intensity and latency was demonstrated. "Neither was susceptibility of the animals, as measured in terms of the number of attacks produced in a given number of tests, related to latency." The latency was found to be rather stable from seizure to seizure. When the pitch of the stimulus was varied, a definite frequency band was found within which the animals reacted with seizures, but the latency did not vary with the pitch. It is concluded that "the underlying psychophysiological processes of the attack follow an all-or-none law with respect to the rate at which they build up to the stage associated with the seizure, although such factors as intensity and frequency determine whether or not these processes will be set into operation."—*K. F. Muenzinger* (Colorado).

617. Overholser, W. Contributions of psychiatry to national defense. *Amer. J. Orthopsychiat.*, 1941, 11, 634-638.—In addition to the function the psychiatrist can play in the induction stage, in the training camps, and in rehabilitation work with those rejected for military service, he has an important function in indoctrinating line officers and medical officers in the elementary principles of mental hygiene of recruits. He must teach not only the early recognition of mental symptoms, but also the development of morale within the organization, which will tend to minimize the incidence of neurotic and psychotic breakdowns.—*R. E. Perl* (Jewish Board of Guardians).

618. Parkhurst, G. Laymen and alcoholics. *Harper's Mag.*, 1941, 183, 422-429.—Alcoholics Anonymous is the name of a group of "former alcoholics with whom healing is an avocation." It comprises over 2000 members in 50 localities of the United States. The movement is a "synthesis of everything that has proved useful in the whole field of alcoholic diagnosis and treatment," including religion, mutual assistance, mental catharsis, self-

appraisal, cultivation of interests, cooperation of relatives. The member must wish to be cured and have a desire to help his fellow drinkers; instead of evading his problems he learns how to solve them. Between 50% and 75% of the members are cured.—*S. S. Sargent* (Barnard).

619. Pathman, J. H., & Freeman, G. L. Effect of "shock" stimuli on skin resistance and overt movements of psychotics. *Psychol. Bull.*, 1941, 38, 715.—Abstract.

620. Pintus, G. [Frequency of mental diseases in relation to age and sex; statistical study based on Genoese data.] *Rass. studi Psichiat.*, 1940, 29, 316 ff.

621. Rosenfeld, M. Vegetative Systeme und Schizophrenie. (Vegetative systems and schizophrenia.) *Nervenarzt*, 1940, 13, 496-510.—Rosenfeld reviews the evidence—general, physiological, clinical, and experimental—as to whether functional disturbances in the central vegetative centers are an integrating link in the etiology of schizophrenia. His conclusion is that the vegetative disturbances (not found in all cases) are nonspecific, and when present, may be of peripheral or external origin. The schizophrenic lesions may affect the midbrain, and this is reflected in the symptomatology. However, the relation of these acute diencephaloses to endogenous schizophrenia is obscure. Study of stuporous patients has disclosed no special irritability of the vegetative centers. Cerebral dysrhythmias of various types are found in many brain diseases, including schizophrenia, and may possibly be related to fluctuations in the vegetative centers. The general opinion that shock therapy produces an acute diencephalosis does not strengthen the theory of the vegetative etiology of schizophrenia.—*M. E. Morse* (Baltimore, Md.).

622. Smith, K. U. Quantitative analysis of the pattern of activity in audio-epileptic seizures in rats. *J. comp. Psychol.*, 1941, 32, 311-328.—1309 white rats were subjected to stimulations by high-frequency sounds produced by a Galton whistle. "At the time of the initial testing convulsions occurred in 437 animals. Kymographic records of convulsions were obtained on 294 animals, which had been placed in a specially devised pneumographic stabilimeter. These records permitted analysis of the temporal characteristics of the seizures. The generalized seizure may be described as consisting of the following components: a) initial running attack; b) initial tonic state; c) second running attack; d) second tonic state; e) clonic phase; f) period of coma; g) period of convulsive jumping. The attack proper is usually preceded by an initial startle reaction to the sound stimulus and a period of premonitory running, so-called because of its prognostic value. A typical seizure may be described as a series of alternate clonic and tonic phases, often interrupted at some point in the cycle by a period of coma." The distributions of initial latencies and the duration of the components of the attack have a multimodal character with high points at 6 and 12

seconds and at multiples of these values, indicating the operation of a cyclic physiological timing mechanism. "The seizure is a type of epileptic convulsion, rather than a neurotic manifestation."—*K. F. Muensinger* (Colorado).

623. Snowden, E. N. Mass psychotherapy. *Lancet*, 1940, 239, 769-770.—Psychotherapy by explanation and reeducation "depends on the facts that in nearly all cases of anxiety or loss of function the cause of the condition is well-known to the patient, or can be discovered by a little careful questioning, and that he has not associated the symptoms with the cause. He must be helped to see that the symptoms of anxiety are physiological and physical more often than . . . mental, and are a normal response to the circumstances in which they arise. . . . Once the patient realizes that the symptoms need not cause anxiety, and that the originating cause is in the past, the way is prepared for reeducation" in which the patient takes an active part. This method can be used as lectures to a class, supplemented with short personal interviews. "Mass psychotherapy of this kind has been tried over a period of 12 months with satisfactory results."—*C. K. Trueblood* (Cambridge, Mass.).

624. Stern, E. S. The aetiology and mechanism of dementia praecox. *Brit. J. med. Psychol.*, 1941, 19, 111-125.—Dementia praecox is shown to be a flight from reality to fantasy, as the normal childish reaction to intolerable circumstances. Many psychological features of dementia praecox are habitually found in primitive man. The involvement of the central nervous system in advanced stages of dissociation accounts for the physical features of catatonia, and in turn for the mode of action of convulsive and hypoglycemic therapy.—*E. R. Hilgard* (Stanford).

625. Sutherland, J. D. Three cases of anxiety and failure in examinations. *Brit. J. med. Psychol.*, 1941, 19, 73-81.—In the first case failure in examinations was related to guilt feelings about sex, failure in this case being regarded as a defensive measure against all sexual behavior. The second case, less completely studied, involved somewhat similar motivation. In the third case the failure could be interpreted as an aggressive act against the mother. The more general significance of examinations as initiation rites is accepted as one reason for the anxiety which they create.—*E. R. Hilgard* (Stanford).

626. Taylor, F. R. The psychoneuroses. *N. C. med. J.*, 1941, 2, 178-184.—Neurotic symptoms are not imaginary. Similar symptoms appear in normal people after emotional stress, but are short-lived. In the neurotic, symptoms may persist because of conditioned reflex mechanism, because of constant dread of the symptom accompanied by adrenalin discharge, or because of an unconscious advantage in being ill. Malingering may often be a patient's way of calling attention to real disorder. Nervous exhaustion is often an escape mechanism; experience of the last war showed that physical exercise for even

a week without rest did not cause exhaustion. Therapy demands that a patient understand his condition rather than that he be exhorted to apply will power.—E. S. Primoff (U. S. Employment Service).

627. Vernon, P. E. Psychological effects of air-raids. *J. abnorm. soc. Psychol.*, 1941, 36, 457-476.—Data collected from 50 observers confirm newspaper accounts of the imperturbability of the majority of the population. Acclimatization even to heavy raids at night has been remarkable. A considerable proportion manage to sleep through the terrific racket. There is no doubt that being with others helps the majority of people, and that those who live alone tend to find raids much more trying. Introspective accounts of what it feels like when bombs fall close are difficult to obtain and often contradictory. There have been fewer cases of neurosis than were expected. There have been no new or unexpected types of "air-raid neurosis." Among people showing neurotic trends before raids began, roughly one-half have shown no change, a quarter have become worse, and a quarter have actually improved. In general, the psychological disorders attributable to raids seem to be considerably less serious than the social disorganization consequent on the destruction of so many homes and personal belongings, the disruption of communications, and the difficulties of feeding, evacuation, etc.—C. H. Johnson (Portland, Ore.).

628. Wolbarst, A. L. Testosterone propionate in male impotence and the excretion of androgens in the urine. *Med. Rec.*, N. Y., 1941, 154, 341-344.—The author reports on a study of 34 men suffering from varying degrees and forms of impotence treated exclusively with testosterone propionate for periods ranging from 2 to 4 months. He concludes that testosterone propionate is valuable in the alleviation of mental and urologic symptoms associated with the male climacteric but has little or no effect on potency in such cases; that it is definitely beneficial in restoring potency in young and middle aged men formerly normal and in whom the psychogenic factor is of minor significance in the dysfunction; that it is of little or no value when impotency derives from deep emotional conflicts and anxieties; and that androgen deficiency is of little or no value in determining hormone insufficiency.—M. H. Erickson (Eloise Hospital).

629. Worrall, R. L. The basis of insanity. *Brit. J. med. Psychol.*, 1941, 19, 95-100.—The limitation and reduction of consciousness in the disorders of association and dissociation is a common feature in all psychoses, which may be grouped together in the single category of dementia. When a demented individual is deeply engaged in dream thoughts, his condition may be referred to as one of psychotic sleep. This conception is elaborated for different psychoses.—E. R. Hilgard (Stanford).

630. Yacorzynski, G. K. Perceptual principles involved in the disintegration of a configuration formed in predicting the occurrence of patterns

selected by chance. *J. exp. Psychol.*, 1941, 29, 401-406.—40 controls, 20 manic-depressives, and 20 schizophrenics "were required to predict the pattern which would occur when one of two objects was selected by chance five times. It had been previously shown that under similar conditions the general population shows a preference for non-symmetrical patterns. The controls showed a preference for the same patterns as the general population. The two psychotic groups differed from the controls or the general population in the patterns which they selected but resembled one another. . . . The most preferred pattern of the psychotics is the 12121 sequence. . . . Psychotics rather than modifying their responses to conform to the special conditions demanded by the instructions resort to more basic patterns which are used by normals in the absence of any inhibitory conditions."—M. J. Zigler (Wellesley).

631. Zilboorg, G., & Henry, G. W. A history of medical psychology. New York: Norton, 1941. Pp. 606. \$5.00.—Medical psychology, of which psychiatry constitutes only one specialized field, is surveyed historically against its various cultural backgrounds to show the course of growth and development from early beginnings to present day concepts and status and to show the role played by various figures in medical history. Of the 14 chapters, only the last 2, organic mental diseases, and mental hospitals, are written by the second author. Other representative chapter headings are: primitive and oriental medical psychologies; the Greeks and the Romans; the restless surrender to demonology; the first psychiatric revolution; the age of reconstruction; the discovery of neuroses and the era of systems. Each chapter has an extensive footnote bibliography.—M. H. Erickson (Eloise Hospital).

[See also abstracts 431, 439, 529, 548, 562, 572, 670, 673, 707, 708, 711, 714, 742, 745, 781, 788, 796, 819, 820.]

PERSONALITY AND CHARACTER

632. Ansbacher, H. L. Murray's and Simoneit's (German military) methods of personality study. *J. abnorm. soc. Psychol.*, 1941, 36, 589-592.—Both Murray and Simoneit take their starting point from the dictum that personality must be studied as a whole, a dictum which leads to a few general principles. Murray lists 8 such principles, 7 of which find a counterpart in Simoneit. The general procedures of the 2 investigators show great similarities, and out of 8 of Murray's main specific procedures 5 have a counterpart in Simoneit. Differences between the 2 methods are due to the fundamental divergence in aims. "It is an evidence of the significance of this type of approach [multiple diagnosis] that two psychologists in different cultures and countries should independently arrive at such similar methods."—C. H. Johnson (Portland, Ore.).

633. Baudouin, C. Découverte de la personne. (Discovery of the self.) Paris: Alcan, 1940. Fr. 18.

634. Bisch, L. E. *Why be shy? How to banish self-consciousness and develop confidence.* New York: Simon & Schuster, 1941. Pp. xvi + 265. \$2.00.—This volume in popular language of the second person is addressed directly to the shy individual. After a 50-item shyness questionnaire is interpreted, there are 3 chapters on showing that many celebrities are shy; encouraging the reader to catalog his assets, faults, and childhood memories from given check lists; interpretations of shyness in terms of sensitiveness, guilt, and fear. Another chapter states numerous specific aids to "toughen the ego." 4 chapters follow with additional specific methods to overcome shyness at home, in business, in social relations, and in love life. The remaining chapters discuss routing sex consciousness, preparations to meet emergencies, effect of shyness on health, prevention of shyness in children, conversion of shyness into an asset, and conclusion.—*F. Mc Kinney* (Missouri).
635. Cantor, N. *What is a normal mind?* *Amer. J. Orthopsychiat.*, 1941, 11, 676-684.—Anyone who has achieved a satisfactory dynamic balance between the need for self-expression and the need for self-repression has a normal personality. Such a person will possess a sense of internal freedom, a feeling of inner confidence, and a lack of disruptive fear. These attitudes will prevent one from reacting too violently to the opposition or hostility of others. In our culture, the contradictions between (1) stimulated needs and their frustration, (2) individual effort and institutional pressure, and (3) competition and cooperation affect all of us more or less. When emotional stresses become too intense, some individuals are unable to make normal adjustment, and these deviating types become either creators or destroyers. Modern civilization does not help in the formation of well-rounded, balanced personalities; it is neurotic. To develop a normal mind we need economic security and opportunity for creative self-expression.—*R. E. Perl* (Jewish Board of Guardians).
636. Chaffey, J. *Judgments of the reputation test as expression of the personality of the judge.* *Psychol. Bull.*, 1941, 38, 738.—Abstract.
637. Donceel, J. *European characterology.* *Thought*, 1941, 16, 503-519.—In contrast to American stress on details, the European approach to character has tended to concentrate upon the whole frame or structure. The better known systems fall into 2 main categories: philosophical and empirical. Included in the former would be the concepts of Klages and of Spranger; in the latter, the static and hereditarian approaches of Kretschmer and of Jaensch, and the more environmentalistic theories of Freud, Adler, and Jung. The author outlines briefly each of these systems. That these various characterologies reach such widely different conclusions does not mean that the approach has been wrong. The complexity and richness of human character make it impossible for any single point of view to provide a complete and exhaustive picture.—*M. R. Sheehan* (Hunter).
638. Draper, J. W. *Lady Macbeth.* *Psychoanal. Rev.*, 1941, 28, 479-486.—The contradictions between the sex and the deeds of Lady Macbeth are caused by choler which produces intense ambition and thus provides the motivation of the play.—*G. Brighouse* (Occidental).
639. Guilford, J. P. *An inventory of factors S T D C R.* Beverly Hills, Calif.: Sheridan Supply Co., 1940. \$4.00 per 100; set of scoring keys, \$1.00; set of machine-scoring stencils, \$3.50; specimen set prepaid, \$0.15.—The inventory consists of 175 questions to which the subject responds by circling Yes, No, or ? and was developed on the basis of factor-analysis studies of items in personality questionnaires. Scores are obtained for 3 types of introverts: the shy, the thinking, and the restrained; and for 3 types of extroverts: the sociable, the non-thinking, and the carefree. In addition it provides scores for 2 emotionality factors, the cycloid and the depressed. Centile norms are based on 388 college students predominantly at the sophomore level.—*S. G. Dulsky* (Rochester Guidance Center).
640. Hampton, P. *Personality scores of grocers and their success ratings.* *Bull. Canad. psychol. Ass.*, 1941, 1, 41-43.—"The results of this study indicate that the personality traits of successful retail grocers deviate very little from those of people in general. Successful grocers are fairly well balanced emotionally, somewhat self-confident, ambivert, slightly dominant, not self-conscious, and a little non-social."—*F. W. Finger* (Brown).
641. Henry, F. *Personality differences in athletes and physical education and aviation students.* *Psychol. Bull.*, 1941, 38, 745.—Abstract.
642. Huntley, C. W. *The significance of the various forms of expression for the judgment of personality.* *Psychol. Bull.*, 1941, 38, 718.—Abstract.
643. Lloyd, W. *Some aspects of language as significant of personality.* *Psychol. Bull.*, 1941, 38, 747.—Abstract.
644. Macfarlane, J. W. *Critique of projective techniques.* *Psychol. Bull.*, 1941, 38, 746.—Abstract.
645. Matsumura, K. [An experimental study on the structure of the person.] *Jap. J. Psychol.*, 1941, 16, 131-165.—The character of children was studied in an experiment of interrupted activities. In terms of the resumption of the activity several types were distinguished, the concept of substitution being emphasized. In terms of transition a light, a heavy, and an intermediate type and abrupt and continuous transitional types emerged. The essential conditions for the intensity of tension are taken into consideration.—*R. Kuroda* (Keijo).
646. Morford, S. D. *The "warming-up" process as a personality variable.* *Psychol. Bull.*, 1941, 38, 749.—Abstract.
647. Moses, P. J. *Theories regarding the revelation of constitution and character through the voice.* *Psychol. Bull.*, 1941, 38, 747.—Abstract.

648. Murphy, A. J. A study of the leadership process. *Amer. sociol. Rev.*, 1941, 6, 674-687.—Studies of the personality traits of leaders have missed the point that the requirements for leadership differ according to the situation. Attention should be given to the leadership process in a variety of situations, and if there are any consistent traits, they will emerge from the study. Job analysis and sociometry are suggested as valuable techniques in the study of leadership, and their use is illustrated with a report of research conducted in a CCC camp.—I. L. Child (Harvard).

649. Myers, M. C. The Rorschach method. *Psychol. Bull.*, 1941, 38, 748.—Abstract.

650. Newman, F. B. An evaluation of observational records in a longitudinal study. *Psychol. Bull.*, 1941, 38, 740.—Abstract.

651. Requard, F. Physik und Erbcharakter. (Physics and inherited character.) *Z. ges. Naturwiss.*, 1940, No. 7-8.—[Abstracted review; original not seen.] Attention and perseverance are the fundamental inherited character traits, and antagonistic types are represented by narrow, fixed attention with tenacious perseverance, and by broad, shifting attention with little endurance. These characteristics are responsible, respectively, for the capacities for absolute and relative thinking. The former enables the establishment of physical events on the basis of definite inner contents, the latter, a connection of physical phenomena with others by determining their relationships.—H. Beaumont (Kentucky).

652. Serebrinsky, B. Sobre medida de la personalidad. (A personality test.) *Rev. Psiquiat. Crim., B. Aires*, 1941, 6, 163-180.—A personality schedule is presented, divided into 6 scales each of which has 10 questions. Scale and item norms are given for ages 11 through 16, based on responses of school girls. Scale intercorrelations range from .006 (hyperemotive and paranoid tendency) to .60 (hyperemotive and psychasthenic). The highest r with intelligence was .65 (hysteric), and the lowest, .07 (hyperemotive). The hysteric scale correlated higher than any other with speed of writing (.49).—E. S. Primoff (U. S. Employment Service).

653. Squires, P. S. Peter Ilich Tschaikowsky (a psychological sketch). *Psychoanal. Rev.*, 1941, 28, 445-465.—The life of Tschaikowsky was one of conflict and tensions marked by homosexuality, work neurosis, misanthropy, and a dread of death. He attempted to escape scandal through a tragic marriage on a brotherly love basis and other conflicts through travel, alcohol, pathological breakdowns, and finally complete devotion to music. Tschaikowsky was well aware of his inadequacies as a man; though not an egomaniac, he never doubted his ultimate success as a musician.—G. Brighouse (Occidental).

654. Stott, L. H. Inventory Every-day Life. Beverly Hills, Calif.: Sheridan Supply Co., 1941. \$4.00 per 100; specimen set prepaid \$0.15.—This is a questionnaire of 150 items to which the subject

responds by circling YES, Yes, ?, No, or NO. It yields scores for 3 factors in self-reliance: independence in personal matters, resourcefulness in group situations, and personal responsibility. Centile norms are based on 380 students in grades 9-12. Time for administration is 30 minutes. Answer sheets are available for machine scoring.—S. G. Dulsky (Rochester Guidance Center).

655. Thornton, G. R. The effect upon judgments of personality traits of varying a single factor in a photograph. *Psychol. Bull.*, 1941, 38, 717.—Abstract.

656. Tiegs, E. W., Clark, W. W., & Thorpe, L. P. The California Test of Personality. *J. educ. Res.*, 1941, 35, 102-108.—The test described represents an attempt to adapt clinical procedures to group testing and re-education. The accompanying manual provides aids in analyzing cases and suggests desirable guidance activities. (See also XV: 4717; 4718.)—M. Murphy (Pennsylvania).

657. Tuddenham, R. The reputation test as a projective technique. *Psychol. Bull.*, 1941, 38, 749.—Abstract.

658. Wallace, R. P. Apparent personality traits from photographs varied in bodily proportions. *Psychol. Bull.*, 1941, 38, 744.—Abstract.

[See also abstracts 435, 493, 670, 674, 691, 704, 799, 800, 817, 818.]

GENERAL SOCIAL PROCESSES

(incl. Esthetics)

659. Alexander, F. Defeatism concerning democracy. *Amer. J. Orthopsychiat.*, 1941, 11, 643-652.—The bases for defeatism are (1) the subjective emotional factor of a latent regressive trend for dependence and (2) the objective factor of economic insecurity. A democracy, in order to survive, must educate its members to emotional maturity through a well planned, psychologically sound educational system, and must offer them a minimum of security.—R. E. Perl (Jewish Board of Guardians).

660. [Anon.] Survey of public opinion. *Lancet*, 1940, 239, 144.—The author briefly describes the organization of the British War-Time Social Survey of public opinion. "It works under the auspices of the National Institute of Economic and Social Research, . . . and is thus connected with, but separate from, the Ministry of Information. The Survey works on a random-sample basis. Its supervisors are trained economists, and many of its investigators are trained social workers. It does not use postal questionnaires, for they are often fallacious. In its interviews with something like 10,000 people so far less than one in a hundred have refused to answer the questions, and the great majority have welcomed the opportunity of telling the Government exactly what they think of them. . . . The greatest care is taken to make sure that the names of the persons interviewed, and even the interview sheets never reach the Ministry of

Information. The results are analyzed at the National Institute, and only these results are available for the Government's use. The value of such an organization has been rapidly appreciated by several departments, and already it has cooperated with the Ministry of Food, the Ministry of Health, and the Board of Trade."—C. K. Trueblood (Cambridge, Mass.).

661. [Anon.] **Results of the War-Time Social Survey.** *Lancet*, 1940, 239, 305.—This article summarizes "the results so far obtained by the War-Time Social Survey, organized by the Home Intelligence Division of the Ministry of Information, and carried out by its investigators who have interviewed some 10,000 people in their homes. . . . There are many points on which the opinions of women differ from those of men, and such differences call for different approaches from the publicity standpoint. Similarly, opinions differ among different income groups. All the studies made so far indicate a remarkable geographical uniformity of opinion on subjects which do not involve local economic or war conditions. . . . The effects of publicity carried out by the Ministry of Information are also constantly being assessed by the survey."—C. K. Trueblood (Cambridge, Mass.).

662. Barber, B. **Acculturation and messianic movements.** *Amer. sociol. Rev.*, 1941, 6, 663-669.—Messianic movements among North American Indians under white influence are interpreted. Evidence is cited, both from comparisons of tribes and from comparisons of individuals within a tribe, for the thesis that acceptance of messianic beliefs is a response to deprivation. Alternative responses to deprivation which have also been observed in these tribes are armed rebellion and passive resignation (as embodied in the Peyote cult).—I. L. Child (Harvard).

663. Blaas, S. **Der Rassegedanke; seine biologische und philosophische Grundlegung.** (The concept of race; its biological and philosophical basis.) Berlin: Junker & Dünhaupt, 1940. Pp. 340.—[Abstracted review; original not seen.] This volume contains the following chapters: (1) racial biology: the theoretical foundation of race; (2) racial psychology: mental heredity, psychological study of race, racial hygiene and eugenics; (3) racial metaphysics: the mind-body problem, the character of race, the doctrine of freedom; (4) racial cultural philosophy: race and consciousness, race and work, race and nobility, race and law, race and state, metaphysical-religious consciousness and race, Spinoza, race and the objective spirit, the philosophy of history.—H. Beaumont (Kentucky).

664. Bronfenbrenner, U. **A method for describing sociometric data in terms of deviation from chance expectancy.** *Psychol. Bull.*, 1941, 38, 716.—Abstract.

665. Bruner, J. S., & Fowler, G. **The strategy of terror: audience response to *Blitzkrieg im Westen*.** *J. abnorm. soc. Psychol.*, 1941, 36, 561-574.—

Reactions to this German terror propaganda film fell into 4 classes: belligerent, defeatist, alarmist, and indifferent. The majority of individuals were in the first and last groups. The belligerent group were predominantly interventionists and anti-German, and stood out against feelings of the futility of resistance. The passive defeatists' response was "thrill." The frightened alarmists knew fear as their sole emotional reaction to the film, with complete surrender during the showing to feelings of futility. The interested but unmoved were very tolerant of the Germans and mildly isolationist. Interventionists tended to resist feelings of futility more readily than did the isolationists. 3 general reaction patterns seemed to accompany successful resistance to feelings of futility in the face of terror propaganda: disgust, anger, or cool psychological distance.—C. H. Johnson (Portland, Ore.).

666. Burrow, T. **Neurosis and war: a problem in human behavior.** *J. Psychol.*, 1941, 12, 235-249.—War is a phenomenon similar to organic dysfunctioning. As is the case with experimentally neurotic animals, man is unable to distinguish right from wrong because of the too close approximation of the affecto-symbolic stimuli offered him. His behavior has become disorganized so that he is the victim of a social neurosis. "In the wider purview of phylobiology the conflict between the conditioned ideology of the Axis powers and that of the Democracies is but the social extension of the right and wrong dichotomy of motivation existing in each of us as partitively systematized personalities."—F. A. Mote, Jr. (Connecticut).

667. Carlson, H. B., & Harrell, W. **Voting groups among leading congressmen obtained by means of the inverted factor technique.** *Psychol. Bull.*, 1941, 38, 716.—Abstract.

668. Castiglioni, G. **Ricerche sul sentimento religioso di adolescenti.** (A study of the religious sentiment of adolescents.) *Arch. Psicol. Neurol. Psichiat.*, 1940, Nov.—[Abstracted review; original not seen.] A survey of the religious sentiments of philosophy students suggests that the concept of divinity is more readily and definitely correlated with ethical concepts than with naturalistic ideas.—H. Beaumont (Kentucky).

669. Chamberlen, B. **Factors determining pro-union scores on the Newcomb test.** *Psychol. Bull.*, 1941, 38, 736.—Abstract.

670. Dai, B. **Personality problems in Chinese culture.** *Amer. sociol. Rev.*, 1941, 6, 688-696.—The frequency of various types of mental disorder among more than 2400 psychopathic cases in Peiping is reported. The social situations specially straining to potential psychopaths in Chinese society are reviewed. 2 case studies are then presented briefly to illustrate the following theses: "One is that personality problems of whatever variety must be considered in the context of the personality organization as a whole, and that the essence of a personality organization is the individual's basic conception of himself formed early in life. The other is that

personality problems mainly come from the conflicts between this basic conception or personality organization of the individual and the demands of the immediate social situation."—*I. L. Child* (Harvard).

671. Donnelly, R. An attempt to determine some of the causal factors behind the formation of ethical standards of junior college students. *Psychol. Bull.*, 1941, 38, 737.—Abstract.

672. Edwards, A. L. Unlabeled fascist attitudes. *J. abnorm. soc. Psychol.*, 1941, 36, 575-582.—The findings of this study would seem to be in accord with those of Stagner, Raskin, and Cook, in which Stagner's scale was used. The major difference between the scale used here and Stagner's scale lies in the method of scoring and in the aspects of fascist ideology covered by the various items. While none of the groups investigated was markedly pro-fascist, the range of scores indicates that some college students have a far greater degree of sympathy for certain fascist principles than might be expected from their otherwise antagonistic reactions to the fascist label.—*C. H. Johnson* (Portland, Ore.).

673. Ephron, H. S. Fascism: a challenge to mental hygiene. *Amer. J. Orthopsychiat.*, 1941, 11, 652-662.—In health and security, when man's adaptive powers are adequate to the challenges of his everyday environment, his dreaming turns into art and science, into building culture. When, however, his economic and political orders fail him, the need for compensatory magic becomes acute. Malevolent magic takes the stage, and anyone who can feed the proper concoction of hate and fantasy to the hungry ones will win followers. In addition to providing economic and social security, democratic government must be directed toward establishing among its people human appreciation and human acceptance. The mental hygienist can and must indicate that it is less important to flood our land with gadgets than to warm the hearts of our citizens with a realization of their own value to one another.—*R. E. Perl* (Jewish Board of Guardians).

674. Eysenck, H. J. Personality factors and preference judgments. *Nature, Lond.*, 1941, 148, 346.—A form of the author's K-test of aesthetic appreciation correlated positively with extraversion and with radicalism. The form of the K-test used consisted of 15 pairs of pictures chosen in such a way that the 2 pictures forming each pair dealt with the same subject, but in different ways. One treated the subject in the modern colorful way associated with Cezanne, Van Gogh, and Modigliani, and the other in the more academic manner of Hobbema, Constable, and Wilson. The test is scored in terms of preference for the modern school. "Preference for modern art tended to be associated with general interest in art. . . . No significant correlations were found with [Guilford's] personality factors S, E or M, although a negative correlation with S approached significance."—*N. R. Bartlett* (Brown).

675. Farnsworth, P. R. Stereotypes of musical eminence. *Psychol. Bull.*, 1941, 38, 732.—Abstract.

676. Gundlach, R. H. Changes in student opinion about ways to peace. *Psychol. Bull.*, 1941, 38, 743.—Abstract.

677. Guttinger, F. Distribution of space in British and Swiss newspapers. *Polit. Quart.*, 1939, 10, 428-441.—Systematic comparison of British and Swiss papers, including a count of "relative space allotted to the various subjects dealt with, similar to the analysis of distribution of space carried out by the authors of the P.E.P. Report." Six leading German-Swiss dailies for the week of July 11-17, 1938, were chosen, together with six English papers. Conclusions: Swiss papers are more "highbrow," and "Swiss readers' interest is focussed on world events abroad to a far greater extent than that of English readers."—(Courtesy of *Publ. Opin. Quart.*).

678. Keiter, F. Nordisch-Vorderasiatisch als rassenpsychologische Polarität. (Nordic-Near Eastern as race psychological polarity.) *Z. Rassenk.*, 1941, 12, 60-65.—(*Biol. Abstr.* XV: 22030).

679. Kris, E. Probleme der Ästhetik. (Problems of esthetics.) *Intern. Z. Psychoanal. & Imago*, 1941, 26, 142-178.—The artist is thought to be divinely inspired because his work expresses desires and needs not permitted ordinary mortals. Through his creations unconscious gratification is provided. While, at first, art was a form of magic, it acquired a special significance and esthetic value when the power of magic declined. Each work of art has its roots in the economic, social, and psychic conditions prevailing at the time of its creation; at the same time, it is the product of the complex individual producing it. Esthetics should approach art from these two viewpoints and draw heavily on psychoanalysis for a correct interpretation.—*H. Beaumont* (Kentucky).

680. Mackenzie, J. G. Psychology, psychotherapy and evangelicalism. London: Allen & Unwin, 1940. Pp. xiii + 238. 10s. 6d.

681. Malinowski, B. Man's culture and man's behavior. *Sigma Xi Quart.*, 1941, 29, 182-196.—After a brief discussion of the nature of cultural process and the biological determinism of culture, the author treats the instrumental phase of human behavior and the emergence of culture. Culture begins when an individual habit is made public and capable of being ingrained by one generation on to the next. Hence one must assume as the "cardinal constituents of culture: artefacts, skills, that is, norms of behavior; organized groups; and means of communication, that is, symbols and theoretical systems of percept and value." From this point of view symbolism must have been precultural.—*N. R. Bartlett* (Brown).

682. Meier, N. C., Mennenga, G. H., & Stoltz, H. J. An experimental approach to the study of mob behavior. *J. abnorm. soc. Psychol.*, 1941, 36, 506-524.—In view of the difficulties in experimental study of crowd behavior, as exemplified in the lynching mob, recourse was had to a modification of experimental procedure closely approximating mob

incitation (assemblage, episode, leader), with provision made for recording at the height of excitement the reactions and motivating context of the individuals present. Under the stress of incitation, 12% indicated an inclination to join the mob forthwith, 23% would go along to see what happened, 29% would have gone with the intention of deterring the mob from lynching the victims, and 35% would have chosen to remain away entirely. In this last category women predominated. This study supports the thesis that in the crowd setting the individual will behave in accord with the dominance of previously established habits, attitudes, and behavior patterns, but that the action itself will be conditioned to some degree by the nature of the situation, since the response of participation or deterrence is to some degree in accordance with the degree to which guilt is or is not completely established.—*C. H. Johnson* (Portland, Ore.).

683. Money-Kyrle, R. The psychology of propaganda. *Brit. J. med. Psychol.*, 1941, 19, 82-94.—Susceptibility to propaganda depends on individual differences in suggestibility (arising out of ideals based on the father's character) and on the person doing the propagandizing (since credulity and suspicion tend to go together). The nature and content of the propaganda are also important. An effective Hitler speech is interpreted according to its 4 themes: to depict the suffering of the German people, to personalize those responsible for the suffering, to emphasize Germany's invincibility, and to depict a sort of paradise for true Germans and true Nazis. These themes correspond to stages of induced psychoses, the depressive-paranoid phases being succeeded by the manic or enthusiastic phase.—*E. R. Hilgard* (Stanford).

684. Moore, C. C. Increasing the returns from questionnaires. *J. educ. Res.*, 1941, 35, 138-141.—In the case of questionnaires sent to school superintendents a type-written letter of transmittal was found more effective than a duplicated letter. Reminders sent 8 weeks after mailing the questionnaires were effective in increasing returns both from school superintendents and from institutions of higher learning.—*M. Murphy* (Pennsylvania).

685. Mosher, W. E. [Ed.] & associates. Introduction to responsible citizenship. New York: Holt, 1941. Pp. viii + 887. \$3.25.—This text is an attempt to integrate for the college freshman findings and methods from the social sciences. The first part is devoted to a discussion of human nature, individual development and social behavior, habit and societies, cultural behavior, institutional behavior, and cultural change. The other parts are devoted to government, economics, democracy, and social philosophy.—*A. Thomsen* (Elmo Roper, Market Research).

686. Pfeiler, W. K. War and the German mind; the testimony of men of fiction who fought at the front. New York: Columbia University Press, 1941. Pp. 369. \$3.25.—This study of the German literary reaction to the war experience of 1914-1918

shows that war predisposed the German psychologically for the acceptance of Hitler's Third Reich. Foreword by G. N. Shuster.—(Courtesy of *Publishers' Weekly*).

687. Porterfield, A. L. Creative factors in scientific research; a social psychology of scientific knowledge studying the interplay of psychological and cultural factors in science with emphasis upon imagination. Durham, N. C.: Duke University Press, 1941. Pp. xii + 282. \$3.50.—This is a study of methodology rather than techniques. It demonstrates the influence of cultural configurations on the methodological assumptions of science, on the delimitation of scientific fields, and on theories of causation. The main focus of attention is on the role of creative insight and reasoning in research. The processes of imagination include imagery, memory, foresight, synopsis, insight, and synthesis; factors in its functioning are the intellectual, the emotional, and the unconscious. The conditioned response explanation of insight is rejected. Imagination is the method of hypothesis. The methods of Galileo, Darwin, Comte, and others are analyzed. Culture plays a significant role in the development and study of personality. Operational methods in sociology fail to give insight into problems of social control.—*H. A. Gibbard* (Brown).

688. Rashevsky, N., & Householder, A. S. On the mutual influence of individuals in a social group. *Psychometrika*, 1941, 6, 317-321.—A previous mathematical study of a situation, in which the behavior of a larger group of individuals is controlled by a smaller group, is generalized for the case when the "activity" of the individuals in a group is continuously graded. The existence of two possible social configurations and of sudden transitions from one configuration to another are found in this case also.—(Courtesy *Psychometrika*).

689. Rauschenberger, W. Über die rassischen Grundlagen der deutschen Tonkunst. (The racial foundations of German music.) *Z. Rassenk.*, 1941, 12, 1-9.—(*Biol. Abstr.* XV: 22044).

690. Scheidt, W. Die europäischen Rassen, ihre Zuchträume und ihre Kulturleistungen. (The European races, their breeding spaces, and their cultural achievements.) *Z. Rassenk.*, 1939, 10, 198-205.—(*Biol. Abstr.* XV: 22047).

691. Schwarz, H. E. Rassenmerkmal und Persönlichkeitsstruktur. (Race characteristics and personality structure.) *Z. Rassenk.*, 1941, 12, 55-60.

692. Selling, L. S. The adjustment of marital problems. *J. Mich. med. Soc.*, 1941, 40, 789-794.—Prevention of marital conflict can be brought about by premarital education and postmarital counseling. Conditions demanding treatment include physical disability, emotional or economic maladjustment, and neurotic mechanisms which magnify slight complaints against the partner. Treatment was successful in an illustrative case where a wife's worries over citizenship status led her mate to strike her.—*E. S. Primoff* (U. S. Employment Service).

693. Smith, M. Similarities of marriage partners in intelligence. *Amer. sociol. Rev.*, 1941, 6, 697-701.—In 433 marriages of University of Kansas students intelligence-test standing at time of college entrance was known for both partners. The correlation coefficient between the test standing of husband and wife was +.19.—I. L. Child (Harvard).
694. Starbuck, E. D. The lower senses as sources of literary appreciation. *Psychol. Bull.*, 1941, 38, 743.—Abstract.
695. Stone, J. War music and war psychology in the Civil War. *J. abnorm. soc. Psychol.*, 1941, 36, 543-560.—In the Civil War soldiers and civilians expressed themselves almost exactly as they had before the war was declared. Because both sides had had a common musical tradition, they both sang the same songs, regardless of the fact that logically they should have had nothing in common but bitter enmity. What songs the soldiers created themselves were merely old tunes given a passing context which generally concerned military life. The special songs of war, those expressing patriotic sentiment, were successful only when they were of the same musical type as the popular music of the period which was minstrel tunes, gospel hymns, and English sentimental ballads.—C. H. Johnson (Portland, Ore.).
696. Strang, R. Methodology in the study of propaganda and attitudes relating to war. *Sch. & Soc.*, 1941, 54, 334-339.—Recently used methods of studying attitudes in relation to the present war are of the following 6 types: (1) quantitative polling techniques, as reviewed by Cantril and under way at Harvard; (2) extended observation of the individual and his situation by several observers to compare attitude with conduct; (3) laboratory studies; (4) analysis of propaganda; (5) psychological studies of groups; (6) Introspective accounts of attitude change. A study of the last type was carried out at Columbia in relation to Churchill's broadcast of February 9, 1941. From a brief questionnaire 4 main attitudes were apparent which had in some instances been strengthened but in no instance been changed by the speech. There was evidence of selective tendencies in listening and remembering. The most valuable outcome of all studies has been the improvement of methodology.—M. Lee (Chicago, Ill.).
697. Stratton, G. M. Violence within the nation. *Psychol. Bull.*, 1941, 38, 732.—Abstract.
698. Symonds, P. M., & Dietrich, D. H. The effect of variations in the time interval between an interview and its recording. *J. abnorm. soc. Psychol.*, 1941, 36, 593-598.—An interview recorded immediately contains the maximum of details of date and place. The significant parts of the interview are not apt to be quickly forgotten; the more meaningful the material is, the more likely it will be remembered. Relationships which were not immediately evident during the interview itself may come with increasing sharpness after a time interval. From the point of view of insight and interpretation, there may be some gain from recording an interview after an interval, provided the interval is not too long.—C. H. Johnson (Portland, Ore.).
699. Thomasson, C. W. Some student attitudes. *Peabody J. Educ.*, 1941, 19, 417-423.—A questionnaire was used to determine the attitudes toward cheating of 206 high school students in a Southern community. The data indicated that the majority of the students believe that it is not right to give or receive aid, that giving aid is less serious than receiving aid, that the honor system would not work in their own school, and that cheating is quite frequent in their school.—N. B. Cuff (Eastern Kentucky).
700. Thorndike, E. L. American cities and states: variation and correlation in institutions, activities, and the personal qualities of the residents. *Ann. N. Y. Acad. Sci.*, 1939, 39, 213-298.—296 statistical series were gathered for all American cities having over 30,000 but less than 500,000 population in 1930, and variations among these cities and the 48 states in these features are presented. 3 scores, "G, I, and P have been computed which may be used as indices respectively of the general goodness of life for good people in the community in question, the per capita income of its residents, and their personal qualities of intelligence, morality and care for their families." Scores in these 3 indices for the cities and states are presented, along with detailed correlations, a discussion of causation, and an attempt to determine "the influence upon welfare of various features of the life of a city or state." (See also XV: 2711.)—A. Thomsen (Elmo Roper, Market Research).
701. Thouless, R. H. Psychological effects of air raids. *Nature, Lond.*, 1941, 148, 183-185.—In general, the provision of communal rather than individual shelters is the better policy. The greater sense of security and the presence of crowds and officials in communal shelters lead to better sleep, recovery of weight, and the loss of neurotic symptoms. The level of morale is discussed. "Investigations in heavily raided areas other than London seem to show that, although morale was in general good, there were failures of morale and a definite tendency for it to deteriorate, particularly in areas which had a number of heavy raids with long periods of calm between them. . . . It was interesting to notice that while people in the most heavily raided areas were more critical and depressed, they were nevertheless more active in A. R. P. work and saved more money than in less raided areas." Psychological factors in the evacuation of children are considered.—N. R. Bartlett (Brown).
702. Tryon, R. C. Psychological basis of errors in the Gallup election polls. *Psychol. Bull.*, 1941, 38, 731.—Abstract.
703. Tsukishima, K. [A short experiment on onomatopoeic words in the Japanese language.] *Jap. J. Psychol.*, 1941, 16, 176-180.—Two groups of 7 Japanese onomatopoeic words expressing sounds and states respectively were given together with two groups of 7 short sentences in English and German

to 7 foreign subjects (German, Indonesian, Swiss, and Russian) who were requested to assign each word to its appropriate sentence. It is shown that high symbolic character seems to exist in Japanese onomatopoeic words.—*R. Kuroda* (Keijo).

704. **Weizman, E.** *Inventory of social behavior.* Beverly Hills, Calif.: Sheridan Supply Co., 1941. \$4.00 per 100; specimen set prepaid \$0.15.—This inventory was designed especially to measure social maturity within the age range from 16 to 25. The content of the test emphasizes the mastery of habits of personal competence and independence. The test calls for reports upon 33 concrete instances of behavior which have been proven diagnostic in a study of about 900 young people, college and non-college, employed and unemployed. It can be self-administering and requires only about 20 minutes to administer and score. Norms are given in terms of social age, centiles, year in college, for men and women separately.—*S. G. Dulsky* (Rochester Guidance Center).

705. **Wright, H. W.** *Psychological worlds.* *J. Phil.*, 1941, 38, 600-608.—The work of several writers is briefly reviewed, and it is pointed out that psychology is concerned with 3 worlds: the behavioral and geographical (in the sense of Koffka) and the cultural. The author contends "that when the world of social culture is understood in relation to the psychological activities instrumental in its production, and to the external environment which calls forth these activities, it introduces the needed connection between the other two worlds and organizes them into one order of objective existence which is complementary to the world of subjective experience." The activities chiefly responsible for man's social culture are articulate speech, manipulative contrivance and practical invention, and emotional expression, all of which are responsive to aspects of the real world and serve as means of communication among members of the social group. The exercise of these 3 activities, together with the use of their social products, relates objects "to a universal world-background; . . . [they] confirm the kinship between the physical universe and the abilities of the human organism."—*C. N. Cofer* (George Washington).

706. **Wyatt, F.** *A case of prediction over a century: Heine on the national-socialist revolution.* *J. abnorm. soc. Psychol.*, 1941, 36, 583-588.—A passage in one of Heine's essays draws from certain elements in German philosophy conclusions regarding the form of the liberal revolution. Reading this passage now, it appears to predict successfully the political events in Germany leading up to the present war. What actually happens is that people establish the predictive relationship between Heine's statements and present events on the basis of structural similarities, consequently taking the statement for a successful prediction. What will happen according to Heine, can be discarded as prediction. The intuitive understanding of certain national trends on the basis of personal experience enabled Heine to predict the potentialities of the German

mind and the consequences concurrent thereto.—*C. H. Johnson* (Portland, Ore.).

707. **Zilboorg, G.** *Paternalistic aggression and individual freedom in the present crisis.* *Amer. J. Orthopsychiat.*, 1941, 11, 638-643.—The author discusses the problem of individual freedom and poses the question as to why the oppressed people of Europe do not feel as oppressed as we imagine they should. The paternalistic aggression of the dictator suppressing all vestige of opposition offers the prostrate citizenry a primitive outlet, the emotional value of which may not be overestimated. Psychiatry is apt to make a serious mistake if, in the light of the above, it transgresses the confines of its role and attempts to cure this cultural mass state of mind. The forces which release or hamper the expression or change the direction of our instinctual drives are not accessible to psychiatry's directive influence, they can only be exposed to its observing eye.—*R. E. Perl* (Jewish Board of Guardians).

[See also abstracts 430, 500, 521, 528, 570, 574, 585, 594, 809, 819, 821.]

CRIME AND DELINQUENCY

708. **Bonhour, A., & Cifardo, R.** *Alienados delincuentes; estadística según la forma clínica y el delito.* (The criminally insane; statistics according to clinical type and crime.) *Rev. Psiquiat. Crim., B. Aires*, 1941, 6, 193-200.—Statistics are presented for 537 cases who entered an institution at La Plata (Hospital Melchor Romero) from 1925 to 1939. An attempt was made to eliminate those who had become insane after committing the crime. Frequencies are given with relation to type of insanity, nationality, occupation, and age. Of the 537 crimes, 359 were committed against persons. Cases with delusions (systematized and unsystematized) form the largest clinical group. Second are those with dementia praecox, and third are the alcoholics.—*E. S. Primoff* (U. S. Employment Service).

709. **Capelli, J. F.** *El "estado patológico" como base de la noción delito-delincuente.* ("Pathological state" as the basis of the ideas of crime and of criminal.) *Rev. Psiquiat. Crim., B. Aires*, 1941, 6, 181-192.—Crime must involve a personal pathological factor. Without this factor, a transgression may be anti-social, but it should not be classed as criminal. Treatment of the criminal should depend not on the exterior aspect of the crime, but rather on 2 distinct considerations: the pathological condition of the criminal, and the degree of danger to society entailed by him. Pathologic state, danger to society, and defense by society can be represented schematically by the balanced legs of a tripod.—*E. S. Primoff* (U. S. Employment Service).

710. **Gruhle, H. W.** *Geographie des Selbstmordes.* (Geography of suicide.) *Nervenarzt*, 1940, 13, 337-341.—Gruhle bases his study on the great differences in suicide rates in the 3 Scandinavian countries and in various parts of Germany. He

discusses particularly the influences of the density and average age of the population, economic crises, and occupation. The city attracts the socially most valuable elements, and social value by no means excludes a greater inclination to suicide. Urban density also means greater opportunities for conflicts and loosening of home and religious ties. The influence of economic crises differs with occupation. During economic upheavals the suicide rate is highest among the economically independent, lowest among the poorest city-dwellers, who experience no psychic crisis. All these factors can be expressed geographically. In German districts where physical violence is common, the suicide incidence is low. It is highest in regions of passive resistance with abusive talk and radicalism. Especially needed are studies on the differences in rate among groups of the same social and religious structure in different regions of a country and the relations between suicide, criminality, and frequency of psychoses in a given part of a city.—*M. E. Morse* (Baltimore, Md.).

711. Gruhle, H. W. *Partielle Geschäftsunfähigkeit. Partielle Zurechnungsfähigkeit.* (Partial incapacity for affairs and limited responsibility.) *Nervenarzt*, 1940, 13, 544-549.—Gruhle discusses the questions of legal responsibility in the cases of querulents, schizophrenics during remissions, and jealous persons. German law regards persons with organic brain disease as wholly incapacitated and persons without brain lesions as fully responsible. However, complete study of the above types reveals involvement of the entire personality. Querulents are schizophrenics, psychopaths, or involuntional cases. Even "recovered" schizophrenics show lack of insight and feeling for the attack, artificiality, and loss of initiative. Jealousy is not an entity but a combination of lack of self-confidence, striving for recognition, vanity, and often persecutory ideas. Jealous persons are considered legally responsible unless they are alcoholics or schizophrenics, but if the idea dominates behavior, they are really irresponsible. To regard psychopaths in general as irresponsible would be impractical, but the legal and medical viewpoints are becoming increasingly divergent. The law recognizes graduated capacity and responsibility in mental defect—why not also in psychopathy?—*M. E. Morse* (Baltimore, Md.).

712. Kinberg, O. Will a conception of imputability be found of practical use in a penal system founded on empirical psychology? *Brit. J. med. Psychol.*, 1941, 19, 124-136.—Imputability signifies moral responsibility and liability to punishment. This metaphysical doctrine should be eliminated from the law, and in its place there should be a description as complete and exact as possible of the different psychic states which in cases of criminality should be punished and of those which should be subjected to other treatments.—*E. R. Hilgard* (Stanford).

713. Kögler, A. *Über jugendliche Mörder.* (Juvenile murderers.) *Msschr. KrimBiol.*, 1941, 32, 73-103.—The case of Hans Z., who at 16 years

murdered a girl of 10, is discussed in conjunction with an autopsy performed upon the murderer's brain. At the age of 3, following a siege of pneumonia and high fever, he suddenly became half-blind and lost the use of speech and limbs. Talking and walking were relearned, and he seemed normal except for periods of rage when aroused. He preferred adult company to that of children. In his last school year he was found trying to undress a young girl. Brain autopsy, following the death sentence, suggested that the murderer had suffered meningitis or encephalitis in early childhood.—*E. S. Primoff* (U. S. Employment Service).

714. Ruskin, S. H. *Analysis of sex offences among male psychiatric patients.* *Amer. J. Psychiat.*, 1941, 97, 955-968.—Approximately 7% of a hospital population were sex offenders. Of this group, 89% committed these offenses after the recognizable onset of the psychosis. The remaining 11% were already criminal problems before becoming psychiatric ones. The majority of the patients came from the 3rd, 4th, and 5th decades. Only 15% of the group were married at the time. Certain types of psychotics showed predominance toward certain types of delinquencies.—*R. Goldman* (Boston Psychopathic Hospital).

INDUSTRIAL AND PERSONNEL PROBLEMS

715. Allgaier, E. *Evaluation of driver tests.* *Amer. J. Optom. Arch. Amer. Acad. Optom.*, 1941, 18, 345-347.—See XV: 5309.—*M. R. Stoll* (Lowell, Mass.).

716. Alpern, M. B. *Visual standards for army air pilots.* *Optom. Wkly.*, 1941, 32, 1101-1102.—A summary of the visual tests and standards for army air pilots as listed in "Standards of physical examination for flying in Army Air Corps," Army Regulations 40-110, War Department, Washington D. C. (April 1, 1940).—*D. J. Shaad* (Lawrence, Kansas).

717. Ansbacher, H. L., & Nichols, K. R. *Selecting the Nazi officer.* *Infantry J.*, 1941, 49, 44-48.—The authors review the techniques of German military psychologists. Selection of future officers appears to be the chief concern of the German program, and to this end the analysis of officer candidates emphasizes the total personality rather than specific abilities. "Everyday approaches have been worked out for four fields of investigation (intelligence analysis, action analysis, expression analysis, and supplementing these, life history)." The typical analysis is outlined by descriptions of sample tests in the two-day examination of two candidates.—*N. R. Bartlett* (Brown).

718. Babcock, V. A. *The test of civil service tests.* *Survey Midmon.*, 1940, 76, 349-351.—[Abstracted review; original not seen.] No clear-cut answer has been given to the question of how to devise civil service tests for social workers which will reveal capacity for growth. Because of the difficulty of testing for this factor by the short answer method it is recommended that such tests include an essay

type question or several short free answer questions.—K. B. Breland (Minnesota).

719. Brown, W. M. More on German military psychology. *Infantry J.*, 1941, 49, 80-82.—This is a letter to the editors in refutation of Guthrie's criticism (see XV: 5320) of Farago and Gittler's *German psychological warfare* (see XV: 4346).—N. R. Bartlett (Brown).

720. Chase, P. H. Directional flashing for motor vehicle signals. *Illum. Engng. N. Y.*, 1940, 35, 417-430.—The author describes an experimental installation on an automobile of a direction signal comprised of 2 or more alternating flashing lights instead of the stationary flashing light used at the present time. The timing and spacing of the flashing lights produce the phi phenomenon, the direction of the perceived motion constituting the signal. The many psychophysical variables related to the gaining of optimum attention and perceptibility are considered. Perception time, rise and fall of sensation, and stimulus intensity are given consideration in determining the optimum stimulus conditions. Results are given concerning the optimum interval between successive phi phenomena, optimum duration of each flash, optimum amount of overlapping in time of successive flashes, the optimum flash rate, and the optimum distance between lights.—G. W. Knox (Chicago).

721. Cleveland, E., Faubion, R. W., & Harrell, W. Aptitude tests for army weather-observer students. *Psychol. Bull.*, 1941, 38, 720.—Abstract.

722. Committee on Work in Industry of the National Research Council. Fatigue of workers and its relation to industrial production. New York: Reinhold, 1941. Pp. 165. \$2.50.—Summarized here are some of the recent advances in knowledge about physical, psychological, and social factors involved in worker welfare. Several investigations sponsored by the Harvard Fatigue Laboratory are reviewed, among them those which established the connection between salt depletion and heat cramps, and those carried on to discover the physiological and psychological effects of oxygen deprivation. The much cited Hawthorne study has shown that physical conditions varying within ordinary limits affect the worker's efficiency to only an insignificant degree. This, plus the ambiguity of the term fatigue which implies dissatisfaction with the job more often than any organic condition, warrants focusing upon human relations in industry as the source of individual maladjustments, misunderstandings between management and labor, and their inevitable result—lowered production. The improved interview and counseling techniques developed at Hawthorne, worker self-expression through unions, and the need for more judicious methods of determining output standards are considered as possible solutions. Great emphasis is laid on the significance of the informal social organization by means of which workers protect themselves against management's innovations and against the repressive effects of formal organization imposed from above.—N. R. Sheehan (Hunter).

723. Crissey, O. L. A study of tests predictive of success in the occupation of job setter. *Psychol. Bull.*, 1941, 38, 720.—Abstract.

724. Cunningham, K. C. [Dir.] Australian Council for Educational Research, eleventh annual report. Melbourne: Brown, Prior, Anderson, 1941. Pp. 42.—Here is included a description of the development of psychological services within the military program. An endeavor is made to assess the significance of projected services. These include mechanical aptitude testing in the munitions field, special aptitude and intelligence testing for the army, research relating to postwar rehabilitation and problems of reconstruction, and construction and standardization of intelligence tests. Listed among the achievements are the results of the administration of a battery of 8 tests to 600 trainees of a signal command. The trainees were ranked on a 5-point scale, and the rankings compared with those made by the army instructors. There was exact agreement in 47% of the cases, and a difference of one position on the scale in a further 45% of the cases.—N. R. Bartlett (Brown).

725. Darley, W. G., & Ickis, L. S. A study of chalkboard visibility. *Illum. Engng. N. Y.*, 1940, 35, 431-443.—The reading perceptibility of classroom blackboards is compared under varying albedos of the chalk and the blackboard, and under variations of illumination, artificial and natural. 2000 recordings were taken with the Luckiesh-Moss visibility meter, in studying the effects of these variables. When the illumination was constant, visibility varied with the amount of brightness contrast between the chalk and the blackboard. Ordinary classroom illumination was found to be insufficient for optimum visibility.—G. W. Knox (Chicago).

726. Ewart, E., Seashore, S. E., & Tiffin, J. A factor analysis of an industrial merit rating scale. *Psychol. Bull.*, 1941, 38, 720.—Abstract.

727. Fridenberg, P. Visual psychology in war time. *Dis. Eye etc. Throat*, 1941, 1, 298-300.—Principles of afterimages, color contrasts, and illusions of motion, form, and contour are employed for visual deception in wartime. Decks in drydock are covered with cloth to simulate fields. Trees are planted on house-tops, and white roads are painted green.—E. S. Primoff (U. S. Employment Service).

728. Ghiselli, E. E. Tests for the selection of inspector-packers. *Psychol. Bull.*, 1941, 38, 735.—Abstract.

729. Goertzel, V. An objective rating form for measuring job success. *Psychol. Bull.*, 1941, 38, 736.—Abstract.

730. Hepner, H. W. Effective advertising. New York: McGraw-Hill, 1941. Pp. xii + 584. \$4.00.—This text for the first year's course is based upon the tenet that advertising's value "rests upon the extent to which it honestly serves consumers." Part I, introduction, lists 10 common criticisms of advertising, and answers each. It also briefly describes the different types of work in advertising. Part II,

the consumer (12 chapters), deals with people as consumers and includes consumer studies, changes in American life, consumer movements, women's influence in purchasing, income groupings, trading areas, questionnaires and other research techniques. Part III, the product (5 chapters), deals with packaging, pricing, trade-marks, business cycles. Part IV, the media (9 chapters), discusses newspapers, magazines, radio, direct-mail advertising, window displays. Part V, the advertisement (11 chapters), begins with attention-getting devices and includes layout, illustration, copy, slogans, headline, coupon, color, novelty, repetition, engraving. Part VI, testing and coordinating advertising (4 chapters), is devoted to techniques for measuring effectiveness. Each chapter is illustrated and closes with references and questions. There is an appendix and a glossary.—A. Thomsen (Elmo Roper, Market Research).

731. Hepner, H. W. *Psychology applied to life and work*. New York: Prentice-Hall, 1941. Pp. viii + 771. Trade, \$5.00; school, \$4.00.—The aim of this text is "to give the reader those psychological facts and methods that meet his needs as a citizen, or as a professional worker or businessman." The 27 chapters are divided into the following parts: introduction (2 chapters); personality development and the adjustment concept (7); predicting the behavior of the individual (4); influencing the behavior of the individual (5); predicting the behavior of the group (3); influencing the behavior of the group (5); principles of research for the student of applied psychology (1 chapter). The appendix includes a social knowledge test, examples of rating scales, and an executive reaction pattern test. Illustrations include many photographs of contemporary psychologists. The text may be used either in the first or second semester of the beginning course.—A. Thomsen (Elmo Roper, Market Research).

732. Holliday, F. *A further investigation into the selection of apprentices for the engineering industry*. *Occup. Psychol., Lond.*, 1941, 15, 173-184.—This is a continuation of a previous report (see XIV: 3710) lending support to its findings and giving a case history report of the progress of the original group of 95 apprentices, as well as the correspondences between scores made by that group and by a later group of 54 additions. 2 types of tests were administered, the NIIP verbal intelligence group test 33 and a battery of practical tests—the Vincent Mechanical Models test, the NIIP Form Relations test, a space perception test, a figure construction test, and a squares test. The results from both groups of apprentices showed that "success at the intelligence test is an indication of success in mathematics and other more theoretical engineering work" and that "success at the practical test battery is an indication of success in drawing and other more practical engineering work." Case history reports indicate the limited values of both stated interests and hobbies and of shop grades as signs of engineering promise.—H. Moore (Business Research Corporation).

733. MacNamara, J. J. *A new method for testing advertising effectiveness through eye movement photography*. *Psychol. Rec.*, 1941, 4, 399-460.—Photographic records of eye movements were obtained from subjects who leafed through a magazine, allowing time spent on each part of each advertisement to be calculated. Subjects were asked later to identify isolated parts of the advertisements with the product advertised. Reliability of the techniques was studied and compared in various populations. A combined probability score was then used to measure attention-holding value of various factors in the displays, such as location in the magazine and position on a 2-page spread. The effect of nearby cartoons on attention-value of advertisements was also measured.—E. J. Gibson (Smith).

734. Palmer, R. A. *How good lighting can contribute to safety*. *Illum. Engng. N. Y.*, 1940, 35, 361-371.—This survey includes the contribution to safety of some psychological factors, especially in the field of vision. 4 fundamental factors related to visual perception are considered: size of details to be observed, amount of contrast between figure and ground, brightness, and time required to perceive objects. Contrast can be increased by merely painting the background appropriately. Production is found to increase 14% to 22% with an increase of foot candles from 3 to 12. Low illumination may cause accidents in a more purely psychological way than by deficient perception, in that a dark gloomy environment may depress mood and decrease alertness. During England's recent blackouts the sudden and complete extinguishing of all lights had a tendency to excite sufficient fear to cause riots, with resulting accidents. Low illumination of .02 to .002 foot candles has been found sufficient to greatly diminish the anxiety.—G. W. Knox (Chicago).

735. Razran, G., Colyer, B. R., & Brown H. C. *Abstracts of aviation psychology*. Washington, D. C.: Civil Aeronautics Administration, U. S. Department of Commerce, 1941.—This volume contains 618 abstracts of publications relevant to the selection and training of civilian pilots in so far as the material was available in New York City up to September, 1940. 45 pages of subject index are included.—W. S. Hunter (Brown).

736. Reid, K. M., & Chanton, H. J. *Daytime lighting requirements for tunnel entrances*. *Illum. Engng. N. Y.*, 1940, 35, 276-279.—The rates of pupil dilation and retinal adaption are not sufficient to compensate for the swift reduction of illumination (from several thousand to a few foot candles) which one encounters as he enters a tunnel during daytime. In order to aid in estimating the required amount of artificial light for proper visibility, laboratory investigations were conducted in determining the maximum rate of decrease of illumination, for which an automobile 100 ft. distant would remain perceptible. The subjects manifested extreme concentration of attention, a set not present in the average motorists. The authors point out the perceptual variations related to these differences

of attention. In addition to artificial lighting, daylight penetration into the tunnel and black pavement outside combined with white pavement, walls, and ceiling inside the tunnel contribute in decreasing the abruptness of the change of light intensity.—*G. W. Knox* (Chicago).

737. Ruckmick, C. A. Applied psychology at the crossroads. *Psychol. Bull.*, 1941, 38, 720.—Abstract.

738. Siebrecht, E. B. Measuring driver attitudes. *Res. Contr. Safety Educ., N. Y. Univ.*, 1941, 2, No. 3. Pp. 29.—This booklet describes the Siebrecht Attitude Scale, which "has been designed to measure attitude toward the general issue of safety in the driving of the automobile. Specifically, it has been devised to measure attitude toward the factors or issues which are thought to be important in the safe-driving situation." The scale is made up of 40 statements, each provided with a series of 5 positions designed to indicate degree of attitude for or against the idea expressed in each item. For purposes of interpreting responses 2 types of norms have been provided: group norms and standard responses for the individual items. The reliability of the scale by the split-half method is $.81 \pm .02$ PE, based upon a group of 100 students enrolled in driver-training courses. Validity has been established through the procedures utilized in the construction of the scale and through the use of the criterion on widely spaced groups. Steps in the construction on the scale are described.—*L. M. McCabe* (Cambridge, Mass.).

739. Slocombe, C. S. The psychology of safety. *Person. J.*, 1941, 20, 42-49; 105-112.—Employees with high accident rates should not merely be shown safety posters or disciplined. They do not have accidents just because they deliberately ignore safety rules, but because they are unable to avoid them. The cause of this inability may lie in poor health, attitude toward employer, lack of interest in the job, or family worries. Poor training may be responsible for many accidents. It was found that new employees were frequently trained by men who had many accidents themselves. Workers sometimes develop bad habits even after good training; these should be pointed out and corrected. Conflicting motives may result in accidents. For example, a driver may think he cannot keep his schedule and avoid accidents, too. Supervisors who are not respected or are disliked have been found to be the root of accident proneness in their employees to whom they tried to teach safety. The cause of accidents must be worked out individually and the person helped to see ways of avoiding them.—*M. B. Mitchell* (Minnesota).

740. Stagner, R., Rich, J. N., & Britten, R. H., Jr. Job attitudes. I. Defense workers. *Person. J.*, 1941, 20, 90-97.—Machine tool workers in 2 New England towns were interviewed. Their relatively high dissatisfaction with wages was explained on the basis of rising living costs, large government contracts for the defense program, and the fact that

their wages were below the industry-wide average. They were generally anti-communistic and isolationist. Satisfied men felt that they and their fellow workers had worked harder because of the defense contracts. It was felt that closer attention to personal wishes and needs of the workers would bring forth even greater effort.—*M. B. Mitchell* (Minnesota).

741. Wright, J. F. Should employment tests be standardized? *Person. Adm.*, 1940, 3, 6-9.—[Abstracted review; original not seen.] Because of the inability to secure homogeneous groups and meaningful norms, standardizing employment tests seems unfeasible. However, critical scores may be secured which will serve as the minimum level of achievement necessary for success on the job.—*K. B. Breland* (Minnesota).

[See also abstracts 408, 453, 480, 537, 551, 581, 583, 618, 627, 632, 640.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

742. Anderson, M. L. The meaning of education for the mentally retarded. *Amer. J. ment. Def.*, 1941, 46, 6-16.—Education for the mentally retarded is a process of adjusting them to the world in which they live by a well balanced program of living. Activities connected with the home, community, recreation, and occupations are incorporated in the program. The major weakness in the present educational plan lies in the lack of understanding about what is pre-vocational and occupational training for the mentally retarded. Since large numbers of these children now are entering the secondary schools, a new type of utility school, entailing active and purposeful learning experiences and maximum pupil participation, is advocated.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

743. Anfinson, R. D. School progress and pupil adjustment. *Elem. Sch. J.*, 1941, 41, 507-514.—A comparison was made of personality characteristics of 2 matched junior high school groups, one being normal in school progress and the other consisting of pupils who had experienced nonpromotion. A significant difference, in favor of nonrepeaters, was found between the groups in social and personal adjustment (Symonds-Block questionnaire) and in adjustment to the curriculum. Various other differences were found not to be significant. "Maladjustment was not directly associated with nonpromotion . . . to such an extent that nonpromotion may be regarded as the essential factor in future maladjustment." Limitations, values, and implications of the study are discussed.—*S. S. Sargent* (Barnard).

744. Arsenian, S. A further study of the Cleeton vocational interest inventory. *Occupations*, 1941, 20, 94-99.—The responses to the Cleeton inventory of 300 college freshmen were compared with their responses to the Strong Vocational Interest Blank,

Bell Adjustment Inventory, and the Link Inventory of Activities and Interests. Using the Strong inventory as a standard, the occupational section of the Cleeton inventory is judged to be fairly valid for the measurement of vocational interests. It has great value for those who have little vocational information, or have given little thought to their vocational choice. Suggestions for the improvement of the scale are made. The SR section is found to have more than a chance relation to psychoneurotic status, overt social adjustment, and degree of ascendance-submission. Because this section is short, it is recommended that a low score be regarded as a suggestion for the use of a longer and possibly more reliable test.—G. S. Speer (Central YMCA College).

745. Baruch, D. W. A further report on the incorporation of therapeutic procedures as part of the educative process. *Psychol. Bull.*, 1941, 38, 746.—Abstract.

746. Bernetta, M. An argument on two extremes in teacher personality. *Peabody J. Educ.*, 1941, 18, 349-357.—Arguments advanced in open-forum technique by American-born and Canadian-born students are given relative to which type of teacher does the most harm to the child, the too inflexible or the too flexible teacher. The general conclusion is that great harm may be done by either extreme and that the teacher should be reasonably flexible.—N. B. Cuff (Eastern Kentucky).

747. Brunschwig, L. Opportunities for Negroes in the field of psychology. *J. Negro Educ.*, 1941, 10, 664-676.—On the basis of the answers received on a questionnaire directed to 122 Negro psychologists an analysis is made of the nature of the psychological work done by these individuals, the training and personality traits required, salaries received, and handicaps encountered. Opinions are expressed on the opportunities and future employment possibilities for both men and women in this field.—W. E. Walton (Nebraska).

748. Buegel, H. F., & Dodge, V. J. Determining the intrinsic difficulty of a tenor song. *Psychol. Bull.*, 1941, 38, 716.—Abstract.

749. Committee on Educational Research. Studies in higher education. Minneapolis: University of Minnesota, 1941. Pp. 200.—This current biennial report of the University Committee includes summaries of 21 separate investigations either in progress or completed during the period 1938-1940, covering the activities of 7 divisions of the University, and grouped under the titles personnel studies, curriculum and instruction studies, and prediction and examination studies.—R. C. Strassburger (St. Joseph's College for Women).

750. Croon, C. W., Willis, M., Calandra, A., Watson, R. E., & Zimmerman, J. G. American Council on Education cooperative general achievement tests (rev. ser.): II. A test of general proficiency in the field of natural sciences, Form S. New York: Cooperative Test Service, 1941. Pp. 11. \$5.50

per 100; specimen set \$0.25.—A new form of the 40-minute examination.—L. M. McCabe (Cambridge, Mass.).

751. Cureton, E. E. Minimum requirements in establishing and reporting norms on educational tests. *Harvard educ. Rev.*, 1941, 11, 287-300.—(*Educ. Abstr.* VI: 1223).

752. Dearborn, W. F., & Wilking, S. V. Improving the reading of college freshmen. *Sch. Rev.*, 1941, 49, 668-678.—The results of 3 separate investigations of remedial reading programs for Harvard freshmen are reported. In the first (1938) experiment, students with low scholastic-aptitude test scores who were subjected to 8 weeks remedial reading training with the Dearborn-Anderson motion-picture technique advanced appreciably in rate of reading and improved generally in scholastic performance. The second (1939) study, involving larger groups and using textbook and literary materials in addition to the reading films, disclosed gains in reading rate and comprehension for the experimental group which proved to be statistically significant. A further experiment (1940) designed to evaluate teaching methods and materials for a reading program demonstrated that remedial work utilizing corrective exercises drawn from textbook material and primary source material similar to that which the college student is expected to read induced marked reading improvement.—R. C. Strassburger (St. Joseph's College for Women).

753. Drake, C. A. A short method for analysing examination questions. *Sch. & Soc.*, 1941, 54, 392-395.—An illustration of an easily used technique is given in which a class of 27 takes an examination consisting of 10 questions. For each question the scores of the 10 students obtaining the highest total scores are tabulated and added. The sums are converted into per cent of total possible. The same procedure is carried out for the 10 pupils with lowest total scores. The difference between these per cents indicates the difference-difficulty of the question. As a rule only questions with a difference-difficulty of 20 or over will differentiate between the best and the poorest students.—M. Lee (Chicago, Ill.).

754. Faubion, R. W., Cleveland, E., & Harrell, W. The influence of training on mechanical aptitude test scores. *Psychol. Bull.*, 1941, 38, 720.—Abstract.

755. Foley, L. Two kinds of reading. *Elem. Sch. J.*, 1941, 41, 515-520.—Reading may be divided into 2 distinct kinds. One resembles talk and creates clear images; the words "stand for just what they are supposed to mean." Elementary reading must begin with this type. The other kind is conceptual and symbolic; it needs to be read rapidly without too much attention to the words as such. Many people are submerged by this latter type of reading and lose their "feeling for more genuinely human reality."—S. S. Sargent (Barnard).

756. Giese, W. J. A new method for scoring the Wiggly Block. *Psychol. Bull.*, 1941, 38, 721.—Abstract.

757. Gordon, H. C., & Herkness, W. W., Jr. Pupils appraise vocational interest blanks. *Occupations*, 1941, 20, 100-102.—The vocational interest inventories of Cleeton, Garretson and Symonds, Gentry, Kuder, LeSuer, Strong, and Thurstone were administered to 50 high school boys. After all the inventories had been administered each boy indicated which was easiest to comprehend, easiest to record his answer, had the most attractive mechanical set-up, contained items with the greatest interest and scope, and yielded the most satisfying results. The results are tabulated and discussed.—G. S. Speer (Central YMCA College).

758. Haggarty, L. H., & Keys, N. Is it practicable to compare "intelligence" and "achievement"? *Psychol. Bull.*, 1941, 38, 732.—Abstract.

759. Hudson, H., & Van Gelder, R. Counseling the handicapped; a manual on aptitudes; their discovery and interpretation. New York: National Tuberculosis Association, 1940. Pp. x + 55.—(*Educ. Abstr.* VI: 1125).

760. Jastak, J., & Bijou, S. Wide range achievement test: reading, spelling, arithmetic from kindergarten to college. Wilmington, Del.: Chas. L. Story Co., 1941. Pp. 4. \$3.00 per 100; manual \$0.25.—This test was designed to meet these requirements of a good clinical test: low cost, individual standardization, suitability of contents, ease and economy of administration, relevance of the functions studied, and comparability of results over the entire range of skills in question. The administration and scoring of the reading test require approximately 5 minutes. Its correlation with the New Stanford Paragraph Reading Test is .81, and with the New Stanford Word Reading Test, .84 (389 7th- and 8th-grade cases). The spelling test requires about 8 minutes and its correlation with the New Stanford Dictation Test is .93 (140 7th- and 8th-grade cases). Results from the arithmetic test correlate with those from the New Stanford Arithmetic Computation Test .91 (140 7th- and 8th-grade cases). The tests have been used with large numbers of subjects ranging from kindergarten to senior college level. Jastak discusses error analysis and test patterns in the manual which accompanies the test.—L. M. McCabe (Cambridge, Mass.).

761. Kefauver, G. N., & Hand, H. C. Appraising guidance in secondary schools. New York: Macmillan, 1941. Pp. xiii + 260. \$3.50.—This volume reports 2 projects of appraisal of guidance programs. Part I reports a survey of certain characteristics of students on the junior high school, high school, and junior college levels and deals with items concerning programs of guidance. Part II reports a 3-year follow-up study of students entering the 7th grade and "utilizing the guidance service cooperatively developed by the teachers, guidance specialists and administrators in the participating schools, and the directors of the study." The topics of Part I are: guidance program in the cooperating schools; objectives of guidance; the guidance programs appraised on the basis of information possessed by

students, of plans held by students, and of the adjustment of students; and an appraisal of the life-career course. The topics of Part II are program of control and experimental junior high schools, experimental programs appraised on the basis of guidance information possessed by students, programs appraised on the basis of the plans and reasons for plans reported by students, and some proposals for the appraisal of guidance.—L. M. McCabe (Cambridge, Mass.).

762. Laycock, S. R. Mental health qualifications for special class teachers. *J. Sch. Hlth*, 1941, 11, 106-112.—Because exceptional children are inexperienced at solving life's problems and have difficulty in adjusting themselves to their deviations from the normal, the teacher must be emotionally mature. She must be free of feelings of inferiority, self-pity, and irritability. A normal range of human contacts outside of work, an understanding of her own personality, and a philosophy of life are requisite. Over-affection for the pupils should be avoided.—E. S. Primoff (U. S. Employment Service).

763. Lingwood, J. The vocational information possessed by secondary school girls. *Occup. Psychol., Lond.*, 1941, 15, 185-198.—By means of a questionnaire the adequacy of information about a chosen occupation of 186 girls between 12 and 16 was estimated; per cents increased with age from 12.8 with an A rating in the second year group to 36.8 in the fifth year group, and in the B ratings from 31.9 to 42.1. After a series of lectures a second questionnaire showed an increase by the instructed group of 11.3% and by the control group of 2.8%.—H. Moore (Business Research Corporation).

764. Luckiesh, M., & Moss, F. K. Effects of classroom lighting upon educational progress and visual welfare of school-children. *Illum. Engng. N. Y.*, 1940, 35, 915-938.—Prior to a 3-year investigation of the effect of artificial lighting upon educational progress and visual welfare, 4 similarly situated classrooms were redecorated and refurnished alike, in order to standardize environmental conditions. 2 rooms were selected as controls, 2 as experimental. Various mental and educational tests were given the pupils (5th and 6th grade) by W. J. Soupe (Missouri), in order to equalize the control and experimental groups. The control room contained 4 150-watt lamps, each in an enclosed prismatic glass luminaire, while the experimental room contained 6 opaque-bowl indirect luminaires, 3 (nearer windows) of 300-watts and 3 of 500-watts. Test results at the end of the 3 years showed a significantly higher educational age for the experimental than for the control group. Visual efficiency, as measured by the Luckiesh-Moss visibility meter (based on thresholds of brightness contrast), showed no significant differences when tested under equal conditions. The rate of decreasing hyperopia with age was greater for the experimental group.—G. W. Knox (Chicago).

765. Peterson, B. M., & Dunlap, J. W. A simplified method for scoring the Strong Vocational

Interest Blank. *J. consult. Psychol.*, 1941, 5, 269-274.—A technique is described which considerably reduces the time necessary to score the Strong blank. All weights of +2, +3, and +4 were reduced to +1. Similarly the negative values were reduced to -1, while weights of +1, 0, and -1 were left unchanged. "The use of the simplified scoring technique was substantiated by the high correlations between the original and simplified scores. Further justification was found in the close correspondence between the predicted and original scores for the control groups."—S. G. Dulsky (Rochester Guidance Center).

766. Read, K. H. Teachers' verbal contacts with children. *Peabody J. Educ.*, 1941, 18, 302-309.—8 teachers were observed from a booth for 222 minutes and their positive and negative statements during free play and supervised activities recorded. The teachers made 2-8 times more positive than negative remarks. Still, there should be further elimination of remarks and questions which tend to build feelings of inadequacy.—N. B. Cuff (Eastern Kentucky).

767. Ryans, D. G. The 1941 administration of the National Teacher Examinations. *Sch. & Soc.*, 1941, 54, 361-368.—Although the national emergency may seem to make satisfactory teacher replacement more difficult, the results of the examination of March 1941 indicate that good teachers are still available. 4,718 candidates were examined, an increase of 992 over the previous year. The results of approximately 250 colleges and 200 school systems were sent. As in former years the highest scores in various fields were obtained by those specializing in those fields. Those with extensive teaching experience did as well or slightly better than novices. In elementary school work, where women predominate, the men represent a higher selection than the women, but there is little sex difference in secondary school work. In general scores were positively related to amount of training, but there was no significant difference between the employed and the unemployed.—M. Lee (Chicago, Ill.).

768. Sarbin, T. R. The relative accuracy of clinical and statistical predictions of academic achievement. *Psychol. Bull.*, 1941, 38, 714.—Abstract.

769. Seashore, C. E. A proposal for a college-entrance preview. *Sch. & Soc.*, 1941, 54, 414-417.—With the "objective of enabling the prospective student to make an inventory in the form of a self-profile of his natural fitness for doing college work" all prospective entrants (possibly even including those for other colleges) might well come into residence for a 2 weeks' period preceding formal entrance. A daily topic (such as interest analysis, emotional stability, personality rating, and specific abilities—the choice depending upon the character of the institution) would be selected by a few specially qualified and interested members of the faculty, and an examination held, supplemented by reading and discussion. The students would score themselves, according to standards furnished, and the rest of the day would be given over to self-directed recreational

activities, entertainment using the talent in the group and social intercourse. In addition to his self-analysis, which would guide him in making college plans or even convince him he should not register at all, the student would acquire insight into making education student-centered rather than faculty-centered. Such a plan is as radical an innovation today as freshman week was 20 years ago, but it is as feasible and as timely.—M. Lee (Chicago, Ill.).

770. Spache, G. A correction in the administration and norms of the Monroe reading aptitude tests. *Elem. Sch. J.*, 1941, 41, 454-458.—On the basis of experience with private school children the writer questions the norms of Monroe's Visual Tests. "When the administrative procedure is modified and chance successes are eliminated, raw scores and percentiles on the visual sections are lower than those found under Monroe's procedure." Tentative corrected norms are submitted.—S. S. Sargent (Barnard).

771. Spache, G. Spelling disability correlates. II. Factors that may be related to spelling disability. *J. educ. Res.*, 1941, 35, 119-137.—Continuation of the author's review of the literature on spelling disability (see XV: 3178) summarized under physical factors, intellectual and temperamental factors, subject matter achievement, and miscellaneous factors.—M. Murphy (Pennsylvania).

772. Spaney, E., & Croon, C. W. American Council on Education cooperative general achievement tests (rev. ser.): III. A test of general proficiency in the field of mathematics, Form S. New York: Cooperative Test Service, 1941. Pp. 12. \$5.50 per 100; specimen set \$0.25.—A new form of the 40-minute examination.—L. M. McCabe (Cambridge, Mass.).

773. Strang, R. Three phases of guidance in the high school. *Sch. & Soc.*, 1941, 54, 357-361.—At the Guidance Conference at Teachers College, Columbia University, April 1940, 3 phases of high school guidance were presented: the principal's part in guidance; the contribution of the standardized test program to the study of pupils; and the conference method for counseling all pupils, not just the problem cases. The principal should see that guidance fundamentals are understood by the faculty and reference books available and used, should see that all teachers dealing with a given student have opportunity for mutual discussion and coordination of effort and have access to cumulative records regarding the pupil, should see that such effort is understood by the parents, and should be ready freely and wisely to adjust individual programs. An exact testing program was outlined, as well as the utilization of the results for replacement, for transfer to other schools, for conferences with pupils and parents, and for self-survey and record of the school system. A description was given of the conference system at Nyack wherein each pupil is discussed by all teachers at least 3 times a year in relation to his background and all of his records.

Such concrete examples indicate how test results may contribute to the better adjustment of pupils and the professional growth of teachers.—*M. Lee* (Chicago, Ill.).

774. Taylor, H. R. The dependability of typical college aptitude test scores. *Psychol. Bull.*, 1941, 38, 734.—Abstract.

775. Trow, W. C. Educational psychology—individual or social? *J. consult. Psychol.*, 1941, 5, 265-269.—The content of courses in educational psychology has been greatly modified by changes in individual psychology but has not been so greatly influenced by social psychology. Because the child's education is distinctly a socio-psychological process taking place in a social medium there should be greater emphasis on such topics as: person-to-person relationships (teacher-pupil, pupil-pupil) and person-to-group relationships (teacher-class, pupil-school, and pupil-home).—*S. G. Dulsky* (Rochester Guidance Center).

776. Trow, W. C. Phantasy and vocational choice. *Occupations*, 1941, 20, 89-93.—161 boys and 169 girls in the 8th, 10th, and 12th grades indicated their vocational choices in terms of probability, possibility, and phantasy. The results are compared with the Maryland survey and census data. It is concluded that these children are realistic in their vocational outlook and in general satisfied with their vocational probabilities; their plans and expectations are in general harmony with their occupational possibilities.—*G. S. Speer* (Central YMCA College).

777. Trow, W. C. Phantasy and vocational choice. *Psychol. Bull.*, 1941, 38, 717.—Abstract.

778. Tuttle, H. S. How motives are educated. New York: Brentano's, 1941. vii + 201. \$1.60.—This is a simplified discussion of the basis for and the development of motivation for teachers and laymen. An introduction argues for the importance of motivation and the necessity of personality analysis. The second part, psychological principles, shows the unified nature of behavior, the relationship of emotions to motives, the nature of intellectual learning, and learning related to motivation. It includes an analysis of integration and a chapter on sources of motivation. The last part, applications, contains a chapter on rewards and discipline, one on the question of indoctrination, and a final chapter on insurgent psychology which estimates the effect of the application of motive-training on education. The book contains numerous cartoons and illustrations.—*F. McKinney* (Missouri).

779. Viteles, M. S. Psychological practice and research in vocational guidance. *J. consult. Psychol.*, 1941, 5, 258-264.—Vocational guidance has passed through the stage of "wide-spread dissemination of all kinds of psychological tests"; is now in the stage in which the emphasis is on the clinical method in counseling; and is on the threshold of the third stage, intensive research designed to evaluate and improve its psychological procedures. Important areas of research are the improvement of psycho-

logical tests and allied objective techniques, the determination of the significance of individual items from the cumulative inventory, evaluation of the total guidance program, framing an adequate definition of vocational success, and the application of factor analysis techniques to individual diagnosis and requirements of the job.—*S. G. Dulsky* (Rochester Guidance Center).

780. Willis, M., & Croon, C. W. American Council on Education cooperative general achievement tests (rev. ser.): I. A test of general proficiency in the field of social studies, Form S. New York: Cooperative Test Service, 1941. Pp. 11. \$5.50 per 100; specimen set \$0.25.—A new form of the 40-minute examination.—*L. M. McCabe* (Cambridge, Mass.).

[See also abstracts 492, 520, 625, 699, 793.]

MENTAL TESTS

781. Brown, J. F., Rapaport, D., Tillman, C. G., & Dubin, S. S. An analysis of scatter in a test battery used in clinical diagnosis. *Psychol. Bull.*, 1941, 38, 715.—Abstract.

782. Davis, F. B. The derivation of three subscores from the 1937 revision of the Stanford-Binet scales. *J. consult. Psychol.*, 1941, 5, 287-291.—A method is presented to objectify the qualitative evaluation of a subject's performance on the revised Stanford-Binet test, Forms L and M. Subscores are computed for reasoning, memory, and vocabulary and are so equated that a comparison of the subject's performances in these 3 areas is facilitated. The method is limited to tests on which the basal age is no lower than year nine. The required tables, presented in the article, may be obtained separately in convenient form, at cost, from the author.—*S. G. Dulsky* (Rochester Guidance Center).

783. Dayhaw, L. T. Une échelle de vocabulaire. (A vocabulary scale.) *Bull. Canad. psychol. Ass.*, 1941, 1, 38-39.—This describes the construction of a scale (see XV: 3607) to be used with French speaking subjects, from 6 years of age to the adult level. It was hoped that it might eventually prove valid as a test of general intelligence. As a measure of validity of the test, the results were correlated with Bellefeuille's scale, yielding coefficients ranging between .75 (6 years) and .95 (adult).—*F. W. Finger* (Brown).

784. Gerstein, S. A suggestion for a revision of the revised Stanford-Binet examination applied to adults. *J. Psychol.*, 1941, 12, 225-226.—Although the group tested (67 prisoners in a Federal penitentiary) was too small to allow final conclusions, the author feels that his results indicate that the short scale of the Form L test should be modified. As age level increases the number of test items correctly answered should decrease, but instead overlapping occurs between levels 13 and 14. Several tests appear to be misplaced, some being too easy and some too difficult for their respective levels; specifically, the vocabulary tests are too easy and the visual imagery and abstract reasoning tests too difficult.—*F. A. Mote, Jr.* (Connecticut).

785. Krugman, M. The present status of intelligence testing. *Child Study*, 1941, 19, 6-8.—The proper uses and limitations of individual and group intelligence tests are discussed.—N. R. Bartlett (Brown).

786. Kuhlmann, F. Types of total scores on mental tests with special reference to a median score on a Binet-type scale. *J. consult. Psychol.*, 1941, 5, 279-286.—Any method of computing total score on a scale or battery of mental tests should prevent the score on any one test from contributing more than its share to this total. The author recommends the "median score method" (the median of a number of individual test scores) and indicates how it can be applied to a Binet-type scale if each of the separate tests in the scale has a number of trials and the score on each is converted into a common measure such as mental age. The median score method gives equal weight to scores on separate tests, makes the examination more flexible when omission of tests is necessary, is simple, and requires less time to compute a mental age than the basal age method.—S. G. Dulsky (Rochester Guidance Center).

787. Lorr, M., & Meister, R. K. The role of test standardization in IQ constancy. *Psychol. Bull.*, 1941, 38, 716.—Abstract.

788. Martinson, B., & Strauss, A. A. A method of clinical evaluation of the responses to the Stanford-Binet intelligence test. *Amer. J. ment. Def.*, 1941, 46, 48-59.—Results of several investigations having to do with refining the clinical methods of interpreting the Binet intelligence test are shown to aid in estimating the probable future course of a child's mental development. The initial study consisted of an analysis of the successes and failures of 200 normal (average IQ 100) and 291 retarded children (average IQ 69) of similar mental ages on the various sub-tests from year VIII through XII of the 1916 scale. A qualitative analysis of the verbal content of the responses of the same 2 groups then was made. A characteristic pattern of successes and failures for normals and defectives was found. A schematic outline was constructed for an evaluation of performance. This consists of 23 tests empirically arranged in 4 groups or fields according to content. A study of several cases illustrates the usefulness of the outline.—M. W. Kuensel (Children's Home, Cincinnati, O.).

789. Pintner, R., & Durost, W. N. Pintner general ability tests: verbal series—Pintner-Durost elementary test, Scale 1, Form A, picture content; Scale 2, Form A, reading content. Yonkers-on-Hudson: World Book, 1941. Pp. 19; 15. \$1.35 per pkg. 25, Scale 1; \$1.20 per pkg. 25, Scale 2; \$0.30 per specimen set.—With the publication of this test the General Ability Tests now cover the entire range from kindergarten to maturity. Scale 1, picture content, is administered orally and hence gives a measure of ability independent of reading ability. Scale 2 is made up of the alternate-answer type of question which the child himself reads. Each scale is made up of 6 subtests: vocabulary,

number sequence, analogies, opposites, logical selection, and arithmetic reasoning. The tests have been standardized on identical populations, and norms are based on scores of 55,000 children in 36 states. Split-half reliability coefficients are .92 and .97.—L. M. McCabe (Cambridge, Mass.).

790. Raven, J. C. Standardization of progressive matrices, 1938. *Brit. J. med. Psychol.*, 1941, 19, 137-150.—Progressive matrices provide a non-verbal series of tests designed for measuring intelligence. The individual test was standardized on 660 children from Ipswich sampled from those born between 1924 and 1932. Subsequently, 1407 children from the same schools were given group tests. Score values are presented in the form of separate curves for the 5, 10, 25, 50, 75, 90, and 95th percentile points at half-yearly ages from 6 to 14 for the individual test and from 8 to 14 for the group test. The group test also includes percentile values for 3665 male adults. Results are compared with those of the revised Stanford Binet, but no correlations are stated. Case notes show that verbal fluency sometimes influences Binet IQ's, while not influencing matrix test scores.—E. R. Hilgard (Stanford).

791. Roff, M. The distribution of test scores. *Psychol. Rec.*, 1941, 4, 462-468.—114 subjects who scored very high on an opposites test were selected for rescoring on a sub-test of the 5 most difficult items. The distribution on the original test was J-shaped, that on the difficult items, normal. A population drawn from the low end of the scale of the original test yielded similar results with easy items. The results indicate the difficulty of making inferences about distribution of "true ability" from sets of psychological test scores.—E. J. Gibson (Smith).

[See also abstracts 407, 819.]

CHILDHOOD AND ADOLESCENCE

792. Bakwin, H. Infant training. *Proc. 7th Inst. except. Child, Child Res. Clin.*, 1940, 14-28.—The psychological, as well as the physical development of the child takes place according to a more or less fixed schedule, based on the rate of maturation. The attempt to push the activities of the child beyond the limits imposed by this schedule frequently leads to disappointments and subsequent personality problems. For this reason the parent should have some acquaintance with the normal program of development. A detailed discussion of some developmental aspects of the child's life is given, including among the topics: fundamental needs of the child, developmental retardation, discipline, the newborn, early infancy, thumb sucking, mental development, training.—F. W. Finger (Brown).

793. Barker, H. M. Factors in adolescent development related to school adjustment. *Psychol. Bull.*, 1941, 38, 737.—Abstract.

794. Bayley, N. Body-build in adolescents studied in relation to rates of anatomical maturing, with

implications for social adjustment. *Psychol. Bull.*, 1941, 38, 738.—Abstract.

795. Billig, A. L. Finger nail-biting: its incipency, incidence, and amelioration. *Genet. Psychol. Monogr.*, 1941, 24, 123-218.—The purpose of the study was "to determine how and to what extent nail-biting is related to age, sex, siblings, intelligence, fear, sense of guilt, neuroticism, conformity to school situation, infractions, and corporal punishment." Effort was made "to find its duration, the precipitating factors, the prepotent stimuli, opportunity of learning, postures assumed while indulging, and the effect of school examinations on nail-biters." The investigation covered a period of 8 years. Elementary school children, 10th grade children, and some children from the Allentown State Hospital were studied. Among the standardized interview techniques used were the Woodworth-House Mental Hygiene Inventory, the Bernreuter Personality Inventory, and the Bell School Inventory. Nail-biters were found to have slightly lower IQ's than other children and to be somewhat more neurotic. Nail-biting is most likely to have its incipency between the ages of 8 and 10. Therapy by negative conditioning or any other technique "will be successful only if the individual is favorably disposed toward it and has a desire to desist." "In spite of the nail-biters' apparent conformity, they are non-conformists." 16 recommendations are made and 75 references cited in the bibliography.—F. M. Teagarden (Pittsburgh).

796. Carlton, T. The interpretation of picture sequences by mentally retarded adolescents and normal children. *Amer. J. ment. Def.*, 1941, 46, 63-71.—A method of analysis of children's interpretative ability was formulated by use of 2 picture sequences, and the responses of 85 mentally retarded adolescents were compared with those of 80 normal children in connection with each element of this ability. Mental defectives made a greater number of mean interpretations to certain picture series than did the normals. An important finding concerned the type of time reference made by the 2 groups. Subnormals based a disproportionate number of their interpretations on present pictures, and the normals based theirs more frequently on past and future pictures.—M. W. Kuensel (Children's Home, Cincinnati, O.).

797. Champney, H. The variables of parent behavior. *J. abnorm. soc. Psychol.*, 1941, 36, 525-542.—Consideration is given to the problem of setting up hypotheses as to what variables are functionally significant as part of the child's environment. An outline is presented of specifications for a good variable. A procedure is described whereby a list of preliminary items is boiled down to 8 basic factors, and then expanded along lines of psychologically significant parent-child relationships, yielding 70 variables of parent behavior.—C. H. Johnson (Portland, Ore.).

798. Dembo, T. Recent studies in moral conflict at the Iowa Child Welfare Research Station,

University of Iowa. *Psychol. Bull.*, 1941, 38, 733.—Abstract.

799. Erikson, E. H. Further explorations in play construction: three spatial variables in their relation to sex and anxiety. *Psychol. Bull.*, 1941, 38, 748.—Abstract.

800. Frenkel-Brunswik, E. Relationships between self-reports and personality ratings in adolescents. *Psychol. Bull.*, 1941, 38, 737.—Abstract.

801. Gesell, A., & Thompson, H. Twins T and C from infancy to adolescence: a biogenetic study of individual differences by the method of co-twin control. *Genet. Psychol. Monogr.*, 1941, 24, 3-122.—This monograph brings together the various studies of the identical twins, twin T (trained) and twin C (control). These twins have been studied by Gesell and his colleagues from early infancy to about 14 years of age. The subject headings include physical development, motor behavior, adaptive behavior, language behavior, personal-social behavior, comparative characterization, and biogenetic interpretation. "The differences which have been established by long and zealous inquiry finally prove to be so slight that they would be set down as similarities if they were encountered in a study of unselected children, or even of ordinary siblings." Discussion is also given as to co-twin control as a comparative method. Charts, tables, drawings, samples of compositions written by the twins, reports on vocabulary are among the factual data presented in the study. The bibliography lists 6 published studies, and the body of the monograph mentions a number of further, unpublished studies.—F. M. Teagarden (Pittsburgh).

802. Haggard, E. A., & Sargent, H. Use of comic-strip characters in diagnosis and therapy. *Psychol. Bull.*, 1941, 38, 714.—Abstract.

803. Hartson, M. F. Parent behavior as related to child development: profile analysis. *Psychol. Bull.*, 1941, 38, 718.—Abstract.

804. Horne, B. M., & Philleo, C. C. Comparative study of the spontaneous play activities of normal and mentally defective children. *Psychol. Bull.*, 1941, 38, 718.—Abstract.

805. Irwin, O. C. Effect of strong light on the body activity of newborns. *J. comp. Psychol.*, 1941, 32, 233-236.—349 infants under 10 days were subjected to 5 minutes of light of 5, 25, and 50 footcandles after they had first been given a 5 minute period of light adaptation under an illumination of 5 footcandles and then various periods of dark adaptation from 1 to 20 minutes. The results show that in terms of both number of cases and amount of movement there is a reduction in body activity with transition from darkness to light and with increase in illumination. The length of dark adaptation does not seem to be a factor in this effect.—K. F. Muenzinger (Colorado).

806. Jones, M. C. The interests of adolescents. *Psychol. Bull.*, 1941, 38, 738.—Abstract.

807. Klingman, W. O. Life begins. *Proc. 7th Inst. except. Child, Child Res. Clin.*, 1940, 8-14.—This discussion is centered around the topic "The clinical physiology of the immature nervous system." Because of the functional immaturity of the neonate the clinical examination of its nervous system presents special difficulties. At birth the afferent pathways and their cortical projection areas are relatively complete, but full myelination of the principal tracts (especially motor) and association centers continues for about 10 months. Since myelination closely parallels the development of physiological activity, complex patterns cannot be expected to appear normally in early life, and abnormal development of the nervous system may not be apparent for many months. For this reason, appraisal of the functional activity of the immature system must include the observation of a special group of reflexes. These reflexes are enumerated, and their development is described at some length.—F. W. Finger (Brown).
808. MacDonald, J. M. Autistic gestures displayed by young children in an "insecure" situation. *Psychol. Bull.*, 1941, 38, 739.—Abstract.
809. Meltzer, H. Hostility and tolerance in children's nationality and race attitudes. *Amer. J. Orthopsychiat.*, 1941, 11, 662-676.—This is one of a series of studies concerned with the development of nationality and race attitudes in American children. 18 children were interviewed, 8 picked by teachers as being the most tolerant, 8 as being the least tolerant, and 2 as being the most colorful. Important factors in the development of prejudices are home, religious, and economic backgrounds. The children with the largest number of intense dislike reactions have a deep sense of insecurity in their home or substitute home relations. Tolerant children tend to be more informed about the social concepts they reacted to than the intolerant children. There is practically no relationship between the tolerance of the children as scored in these interviews and their classification as tolerant or intolerant by their teachers.—R. E. Perl (Jewish Board of Guardians).
810. Neall, H. E. The radio listening preferences of public school pupils in the first five grades. *Psychol. Bull.*, 1941, 38, 735.—Abstract.
811. Pardee, I. Adolescence. *Proc. 7th Inst. except. Child, Child Res. Clin.*, 1940, 41-55.—This is a discussion of the physical and glandular changes which take place at the time of adolescence, with a consideration of the emotional and behavioral problems that are entailed. Especial reference is made to the consequence of abnormal glandular development, and 2 case histories are introduced as illustrative material.—F. W. Finger (Brown).
812. Powell, M. Relations between sociable behavior as time-sampled in nursery school and rated behavior traits. *Psychol. Bull.*, 1941, 38, 718.—Abstract.
813. Read, K. H., & Conrad, H. S. Scores F, U, N, and T from the Read-Conrad inventory for nursery school children. *Psychol. Bull.*, 1941, 38, 736.—Abstract.
814. Reca, T. Retardo afectivo y trastornos de conducta en la infancia. (Emotional immaturity and behavior disorders in childhood.) *Arch. argent. Pediat.*, 1941, 16, 107-125.—Emotional immaturity shows itself in over-dependency, retarded speech, and absence of activities common to the child's age group. Prevention necessitates: elimination of breast or bottle feeding by the second year; separate sleeping quarters from parents; suppression of baby-talk, temper tantrums, and timidity; and participation in games with others of the same age. 3 cases are presented, one of which was complicated by neurotic symptoms and undeveloped mentality. In this case, a boy of 4, a 2-months training away from home was successful.—E. S. Primoff (U. S. Employment Service).
815. Rethlingshafer, D. Comparison of normal and feeble-minded children with college adults in their tendency-to-continue interrupted activities. *J. comp. Psychol.*, 1941, 32, 205-216.—29 feeble minded children, 29 normal children, and 41 college students were compared with each other in their tendencies to continue when interrupted in various tasks, such as modeling and cutting paper patterns in the case of the children and solving block puzzles in the case of the adults. The behavior of the subjects at the time of the interruption was classified in terms of 17 categories ranging from non-resumption to complete-refusal-to-be-interrupted. The relative frequencies in these categories vary considerably, but show a striking similarity in the 3 groups of subjects. The relation between intelligence and tendency-to-continue was found to be negligible. The correctness of using only overt behavior as a means of measuring tendency-to-continue is discussed.—K. F. Muensinger (Colorado).
816. Rothney, J. W. M. Recent findings in the study of physical growth of children. *J. educ. Res.*, 1941, 35, 161-182.—This is a review of recent longitudinal growth studies, stressing particularly the results of the Harvard Growth Study. The facts of physical growth in height and weight, the relationships between rates of growth in different parts of the body within the same individual, the existence of body types, the relation of physical growth to mental growth, and the development of personality traits are considered.—M. Murphy (Pennsylvania).
817. Sanford, R. N. Some quantitative results from the analysis of children's stories. *Psychol. Bull.*, 1941, 38, 749.—Abstract.
818. Solomon, J. C. Direct treatment of behavior and personality problems of childhood. *Psychol. Bull.*, 1941, 38, 747.—Abstract.
819. Sparling, M. E. Intelligence of Indian children; the relationship between Binet and Porteus scores. *Amer. J. ment. Def.*, 1941, 46, 60-62.—Different standards must be employed in the diagnosis of mental defect for Indian than for white children since Indians test lower than whites on the

Binet scale and higher, on the Porteus Maze test. The difference between average IQ's on these 2 tests in an investigation of 32 institutionalized cases was 33 ± 5.2 points.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

820. Strauss, A., & Werner, H. The mental organization of the brain-injured mentally defective child. *Amer. J. Psychiat.*, 1941, 97, 1195-1203.—On the basis of sensori-motor tests, visual-motor and auditory-motor, the authors conclude that there exists an impairment of rather general nature in the child with the exogenous type of mental deficiency. Brain-injured mentally defective children show similar peculiarities in verbal intellectual functions. They may show verbosity, affected style, irrelevancy, and dyslogical responses. Behaviorally, they are erratic, uncoordinated, uncontrolled, disinhibited, and socially unaccepted. It is suggested that these exogenous children be called mentally crippled to distinguish them from the usual group of mentally deficient children and they be considered a special educational problem.—*R. Goldman* (Boston Psychopathic Hospital).

821. Thom, D. A. The psychiatric aspects of civilian morale as related to children. *Ment. Hyg.*, N. Y., 1941, 25, 529-538.—Adults have the responsibility of building a morale in youth which will be impregnable to totalitarian ideologies and resistant to the effects which fear, insecurity, and the disintegration of family life engender.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego).

822. Ushijima, Y. *Seinen no shinri*. (Psychology of youth.) Tokyo: Ganshōdō-shoten, 1940. Pp. 281. Yen 2.80.—This book consists of the following chapters: (1) introduction including problems and method in the study of adolescence, its meaning, and development of its mental structure; (2) development of self-consciousness including disobedience, emotion, sentiments, and vocation; (3) development of social consciousness including solitude, love, and expansion of social consciousness. Each chapter includes concrete examples explaining the author's view on the behavior of youth. Bibliography.—*R. Kuroda* (Keijo).

823. Voegeli, B. Untersuchungen über die Intelligenzentwicklung frühgeborener Kinder. (Investigations into the intelligence development of premature children.) *Arch. Klaus-Stift. Vererb.-Forsch.*, 1940, 15, No. 3.—[Abstracted review; original not seen.] In the absence of unfavorable heredity or severe birth complications, premature children weighing less than 2,500 gr. ($5\frac{1}{2}$ lbs.) at birth develop within normal range of intelligence. The middle range of IQ's for 165 children who were examined within 4-13 years after residence in a Zurich infants' home was distributed as follows: 101-110, 19.4%; 91-100, 42.4%; 81-90, 24.2%.—

G. C. Schwesinger (American Museum of Natural History).

824. Weech, A. A., & Campbell, R. V. D. The relation between the development of behavior and the pattern of physical growth. *Child Developm.*, 1941, 12, 237-240.—Correlations were computed for 33 infants between behavior development (sitting, creeping, walking) and weight at 50 days and percent increase in weight from 50 to 150 days of age. "When the influence of the association between weight at 50 days and rate of gain during ensuing months is excluded by partial correlation, the coefficient describing the relationship between weight at 50 days and behavior development is not significant. On the other hand, the association between percentage gain in weight and behavior development remains significant even when the effect of variations in weight at 50 days is excluded by partial correlation." The association between behavior development and pattern of physical growth should be important in assessing "the significance of individual advancement or retardation in the development of behavior."—*C. N. Cofer* (George Washington).

825. Wilson, F. T. Reading interests of young children. *J. genet. Psychol.*, 1941, 58, 363-389.—Questionnaire data concerning reading interests were obtained from parents of 152 children of the kindergarten, first, and second grades of Hunter Model School. These pupils were from homes of "superior privilege." In general, the children had evinced an interest in reading long before entering school. Children's books had been available to them at an early age, and adults frequently read to them. The reading preferences were varied, showing only small grade-level differences. Dramatic play and wide interest in radio programs were also characteristic of the group.—*F. W. Finger* (Brown).

826. Wright, B. A. An experimentally created conflict expressed in a projective technique. *Psychol. Bull.*, 1941, 38, 718.—Abstract.

827. Wright, M. E. The influence of frustration upon the social relationships of young children. *Psychol. Bull.*, 1941, 38, 710.—Abstract.

828. Yates, D. H. Clinical findings for a constructive remedial therapy. *Psychol. Bull.*, 1941, 38, 746.—Abstract.

829. Yugend, L. The rôle of parental attitudes in the treatment of diseases in children. *Ment. Hyg.*, N. Y., 1941, 25, 591-605.—A series of case studies is presented to illustrate the ways in which parental attitudes affect children's diseases. Frequently some psychotherapy for the parents is necessary before a child's condition can be expected to improve.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego).

[See also abstracts 410, 460, 496, 586, 645, 657, 745, 776.]

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- Journal of Abnormal and Social Psychology**—Northwestern University, Evanston, Ill.: American Psychological Association, Inc. \$5.00. 560 pages annually. Edited by Gordon W. Allport. Quarterly. Founded 1906.
- Journal of Educational Psychology**—Baltimore, Md.: Warwick & York. \$6.00. 720 pages annually. Edited by J. W. Dunlap. Monthly except June to August. Research studies in learning and teaching. Founded 1910.
- Psychoanalytic Review**—New York, N. Y.: 64 West 56th St. \$6.00. 500 pages annually. Edited by Smith Ely Jelliffe. Quarterly. Founded 1913.
- Journal of Experimental Psychology**—Northwestern University, Evanston, Ill.: American Psychological Association, Inc. \$14.00 per annum (2 volumes). 1040 pages annually. Edited by Samuel W. Fernberger. Monthly. Founded 1916.
- Journal of Applied Psychology**—Indianapolis, Ind.: C. E. Pauley & Co. \$6.00. 600 pages annually. Edited by James P. Porter. Bi-monthly. Founded 1917.
- Journal of Comparative Psychology**—Baltimore, Md.: Williams & Wilkins Co. \$14.00 per annum (2 volumes). 1000 pages annually. Edited by Roy M. Dorcus, Knight Dunlap, and Robert M. Yerkes. Bi-monthly. Founded 1921.
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